

THE
CALCUTTA REVIEW.

VOLUME LXXII

1881.

No man who hath tasted learning but will confess the many ways of profiting by those who, not contented with stale receipts, are able to manage and set forth new positions to the world: and, were they but as the dust and cinners of our feet, so long as in that notion they may yet serve to polish and brighten the armoury of truth, even for that respect they were not utterly to be cast away.—MILTON.

CALCUTTA:

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No. CXLIII.

CONTENTS.

	Page.
ART. I.—THE GEOGRAPHY OF THE GREEKS AND ROMANS	1
„ II.—EURASIAN AND POOR EUROPEANS IN INDIA ...	38
„ III.—THE RISE OF AMRITSAR AND THE ALTERATIONS OF THE SIKH RELIGION ...	57
„ IV.—ORIENTAL FOLKLORE.	
Mámún and the old Persian ...	76
„ V.—THE FINANCIAL ASPECTS OF INDIAN IRRIGATION.	
Canals (I) Direct Returns ...	90
„ VI.—NOTES ON EARLY COMMERCE IN BENGAL ...	113
„ VII.—PRELATES ON EVOLUTION.—(<i>Independent Section.</i>)	
1.—On the Relation between Science and Religion through the Principles of Unity, Order, and Causation. Read before the Victoria Institute, by the Rt. Rev. Bishop Cotterill, D.D., etc.	
2.—Charge to the Clergy and Laity, etc., by the Archbishop of Canterbury ...	129
„ VIII.—HOW ARE THEY TO LIVE? ...	137
„ IX.—A PROBLEM FOR THE ECONOMISTS ...	154
„ X.—POLICY OF THE NEW RENT LAW FOR BENGAL AND BEHAR.	
1.—The Report of the Rent Law Commission, with the Draft of a Bill to consolidate and amend the Law of Landlord and Tenant within the Terri- tories under the Administration of the Lieute- nant-Governor of Bengal; and an Appendix containing the Proceedings of the Commission and the Papers considered and referred to in the Report and Proceedings—Calcutta, 1880,	
2.—The Proposed New Rent Law for Bengal and Behar, by Babu Ashutosh Mookerjee—(October Number of the "Calcutta Review")—Calcutta, 1880.	
3.—The Bengal Regulations ...	161
„ XI.—"TRAVELS OF A HINDU" ...	196
THE QUARTER ...	213

CRITICAL NOTICES:—

1.—GENERAL LITERATURE.

- 1.—A Digest of Civil Law for the Punjab, chiefly based on the Customary Law as at present judicially ascertained, by W. H. Rattigan (Lincoln's Inn), Barrister-at-Law. Allahabad : Printed at the Office of the *Pioneer* . . . i
- 2.—The Life, Times, and Correspondence of the Right Rev. Dr. Doyle, Bishop of Kildare and Leighlin, by W. J. Fitz Patrick, LL D, M.R, I.A., &c., Dublin ; M. H. Gill and Son, 50, Upper Sackville Street ; & London, James Duffy and Sons, Paternoster Row ... iii
- 3.—The Industrial Arts of India, by George C. M. Bridwood, C.S.I., M.D., Edinburgh, Art Referee for the Indian Section of the South Kensington Museum ; with Maps and Woodcuts. Published for the Committee of Council on Education, by Chapman and Hall, Limited, 193, Piccadilly vii
- 4.—Mathura, a District Memoir, by F. S. Growse, B.C.S., M.A., Oxon., C.I.E ; Fellow of the Calcutta University. Second Edition : Illustrated, Revised and Enlarged, 1880. Printed at the North-Western Provinces and Oudh Government Press ix
- 5.—Records of the Geological Survey of India, Vol. XIII, Part 4, 1880. To be had at the Geological Survey Office, Indian Museum ; at the Office of Superintendent Government Printing, Calcutta : London, Trübner & Co. ... xi
- 6.—Memorial to His Honor the Lieutenant-Governor of Bengal, with notes on the proposed Rent Law, &c., by the Behar Landholders' Association, Bankipore. Printed by Narain Chaudar Chakrabarti, at the *Behar Herald* Press ... xiii
- 7.—A few notes on Hindi, by Radhika Prasanna Mukherji, Calcutta. Printed by Behary Lall Bannurji at Messrs. J. G. Chatterji and Co.'s Press, 44, Amherst Street xiii
- 8.—Accounts relating to the Trade and Navigation of British India for the month of October 1880, and for the seven months, 1st April to 31st October 1880, compared with the corresponding period of the years 1878 and 1879. Published by order of the ~~Governor-General in Council~~, at the Office of the Superintendent of Government Printing, Calcutta xiii

- 9.—Sketches of Army Life in Russia. By F. V. Greene, Lieutenant of Engineers, U. S. Army. Late Military Attaché to the U. S. Legation in St. Petersburg; and Author of *The Russian Army and its Campaign in Turkey in 1877-78*. London, W. H. Allen & Co., 13, Waterloo Place xiii
- 10.—Central Asian Portraits; the Celebrities of the Khanates and the neighbouring States. By Demetrius Charles Boulger, Member of the Royal Asiatic Society, Author of "England and Russia in Central Asia," "Yakoob Beg of Kashgar," &c. London: W. H. Allen & Co., 13, Waterloo Place, Publishers to the India Office xiv
- 11.—The Irrigation Works of India, and their Financial Results. Being a brief history and description of the Irrigation Works of India, and of the profits and losses which they have caused to the State. By Robert B. Buckley, Associate Member of the Institute of Civil Engineers, Member of the Institute of Mechanical Engineers, Executive Engineer of the Public Works Department of India, London: W. H. Allen & Co., 13, Waterloo Place, Publishers to the India Office xv
- 12.—Gulshan-i-Raz: The Mystic Rose Garden of Sad-ud-Din Mahmud Shabistan. The Persian text with an English translation and notes, chiefly from the Commentary of Muhamad Bin Yahya Lahiji. By E. H. Whinfield, M.A., Barrister-at-Law, late of H. M.'s Bengal Civil Service. London, Trübner and Co. ... xv
- 13.—Report of the Director of Public Instruction in the Bombay Presidency for the year 1879-80. Printed at the Government Central Press, Bombay xv
- 14.—Report on the Administration of the Baroda State for 1878-79. Published by authority, Calcutta. Printed at the Foreign Department Press xviii
- 15.—Selections from the Records of the Government of the Punjab and its dependencies. New Series, No. XVI, Note on the Revenue and Resources of the Punjab; and No. XVII, Note on the systems of fluctuating assessments in the Punjab, Lahore. Printed at the Punjab Government Civil Secretariat Press xix
- 16.—~~Précis~~ ~~of Official Papers, being abstracts of all Parliamentary Returns directed to be printed by both Houses of Parliament.~~ Session, 1880. W. H. Allen & Co., 13, Waterloo Place, London. Publishers to the India Office xx

2.—VERNACULAR LITERATURE.

- | | |
|--|-------|
| 17.—Bamaṇḍha —By Nanda Krishna Basu, M.A. ... | xx |
| 18.—Yādava-Nandini Kavya. Printed by Iswar Chandra Basu & Co., and Published by Chāru Chandra Mukhopādhyāya ... | xxi |
| 19.—Melā.—Written and Published by Kālimaya Ghataka. Printed by Gopāl Chandra Dé, at the New Sanskrit Press, 14, Duff Street, Calcutta ... | xxiii |
| 20.—Basantā-Utsava (An opera) By the authoress of Dipnirvān. Printed and published by Kali Kinkara Chakravarti at the Valmiki Press, Calcutta ... | xxv |
| 21.—Gochārāner Mātha. By Abshaya Chandra Sarkār. Printed and published by Nandalala Basu, at the Sadharani Press, Chinsurah, 1287 B.S. ... | xxvi |
| 22.—Adhyātmikā. By Pyari Chānd Mitra. Printed and published by Iswar Chandra Basu and Co., at the Stanhope Press, 249, Bowbazar Street, Calcutta, 1880 ... | xxi |

NOTICE TO CONTRIBUTORS.



With a view of securing greater punctuality in the publication of the CALCUTTA REVIEW, Contributors are requested to send in their Manuscripts as early in each quarter as possible.

Editor, C. R.

THE CALCUTTA REVIEW.

NO. CXLIII.

ART. I.—THE GEOGRAPHY OF THE GREEKS AND ROMANS.

MR. BUNBURY'S late work in two goodly volumes, accompanied by twenty illustrative maps, has placed within the reach of every one the wonderful story of the slow and gradual progress of human knowledge of the earth on which they lived, acquired by the Greeks and Romans from the time of Homer to that of the Emperor Antonine. The last was the high water mark of geographical knowledge for many centuries, until Europe woke up from the sleep of the Dark Ages, and it is humiliating to think how even now vast regions are imperfectly known, or not known at all, both in Asia and in Africa. Mr. Bunbury's narrative is in a high degree fascinating : many portions read like a romance : on the other hand, it is the result of many years of study, an accurate comparison of all existing records, and an equally accurate knowledge of geographical facts, as they are known now to exist. It may indeed be called the Manual of Comparative or Historical Geography, as derived from the classical authors, and the basis of our own modern knowledge.

Recent discoveries have revealed to us that there were other systems of geography unknown to the Greeks, and, if known, despised, by the Romans. A large volume of Antient Egyptian Geography has lately been published by Brugsch Bey : the great Assyrian and Babylonian Empires must have had a good knowledge of the countries, east and west and north, which had fallen under their sway : unfortunately neither Herodotus nor Ctesias had access to their documents. That the chief physical features of India were well-known to Sanskrit authors, is evidenced by numerous incidental allusions in many of their works, even as far back as the Veda, which allude to the rivers of the Panjab and to the ocean. Megasthenes might have brought back further notices than he appears to have gathered at the Court of Palibothra. Lastly, Chinese annals disclose a new world of geography and kingdoms.

2. *The Geography of the Greeks and Romans.*

religions, languages, and customs, of which the Greeks never dreamt, and of which the Romans, even down to the time of Ptolemy, the last and greatest geographer, had a most imperfect conception. We must not hoodwink ourselves, and rest upon the old legal maxim that things which do not appear, might as well not exist : when we talk about the knowledge of the world by the antients, we mean only the Greeks and the Romans, who falsely asserted themselves to be the heirs of all the previous ages, and the recipients of all pre-existing knowledge. We know now how small a portion of the intellectual wealth of Egypt, Mesopotamia, India, and China had reached them. The antient Arabians had no doubt a commercial geography of their own, for which they are not fully credited. And during the darkness of the Middle Ages of Europe the later Arabs again took up the task of discovery, and made important contributions to modern knowledge for which they get but scant credit. Our modern explorers in African, east and west, north and south, have revealed the fact that that continent has been traversed by caravans for centuries, and that the knowledge which we have now obtained, might have been attained much earlier, if we had only set about it in earnest.

We can realise somewhat the position of the antient Romans and Greeks to the whole world by considering our own position at the present moment to the centre of Africa, of Borneo, of Papua, of the Peninsula of Korea, of the plateau of Tibet : and forty years ago, of how many parts of nearer and further India, and of the Chinese Empire, little or nothing was known ! How vague was the knowledge of Afghanistan, Kashmir and the Valley of the Indus ! Great as has been the progress during that period of geographical discovery, how much still remains to be done ?

At any rate the Greeks came into the inheritance of whatever traditional or written knowledge the Phœnicians possessed, and we shall see further on that Eratosthenes of Alexandria had access to the Septuagint translation of the Old Testament, which contained the not inconsiderable geographical notices of the Hebrew writers. Unfortunately both the Phœnician and Carthaginian annals have totally perished. As early as the days of Solomon these adventurous merchants had spanned the whole length of the Mediterranean and founded a colony at Tartessus, or Cadiz, beyond the pillars of Hercules. With the name of this great hero, whoever he was, is associated a still more distant discovery, that of the golden apples of the Hesperides, or the islands of the Canaries. Not the slightest allusion is made to this legend by Homer, nor yet to those distant eastern lands with which the Phœnicians must have had direct or indirect intercourse by way of barter, through the Arabians, as far back as the days of Solomon. The silence of

Homer is therefore not conclusive against the Phœnician discoveries to the west, when he is totally silent with regard to their undoubted communications with the east. From Egypt, probably, the Greeks had heard of the Æthiopians, and of the Pygmies, whose existence has in these last days, in these very regions, been ascertained.

Two articles of commerce, unknown as products of the country bordering on the Mediterranean, are mentioned by Homer, and must have been imported from the distant regions beyond the pillars of Hercules by the Phœnicians. These are tin and amber. That the former came from the islands of the Cassiterides there is a concurrence of testimony, and that these islands represented the county of Cornwall there can be no doubt. The latter is found exclusively on the northern shores of Germany, and most extensively on the shores of the Baltic Sea. We have to believe, that the Phœnicians had communication, directly, or through third parties, with the collectors of this valuable commodity, or that it was conveyed overland, as unquestionably it is frequently mentioned by Homer.

As was to be expected, the earliest voyages and travels, that have come down to us, are enshrined in poetry, and surrounded with a halo of fiction, though accepted as genuine history by the uncritical ancients. The first of these legends, and anterior to Homer, is the voyage of the Argonauts. It was developed, and enlarged and localized by succeeding chroniclers, and it was fondly believed, even at the time of Augustus, that Colchis and the banks of the River Phasis were the scene of the events narrated : but there is no authority for such details. From Mimnermus, the oldest authority, we learn no further than that Æetes lived on the banks of the Ocean-stream in the farthest East, and Homer alludes to the voyage as even in his time world famous. In this critical age we know from our experience of the poems and novels of Walter Scott, how soon the most airy creations of the brain are localized, and entirely groundless details accepted as fact, by a too credulous generation. All that can be conceded is, that at a very remote period, long before the colonization of the shores of the Black Sea, some adventurous Greek navigator did penetrate through the Straits of the Dardanelles and the Bosphorus into the Euxine.

The geographical notions of Homer in his two great epics are next in date. There can be no doubt that Homer believed the earth to be a place of circular form, surrounded on all sides by the ocean, which was conceived of, not as a sea, but as a vast continuous stream, flowing round the earth : that the sun rose out of the Ocean-stream, and again sunk into the same at setting ;

4 *The Geography of the Greeks and Romans.*

the stars followed the same course, and bathed every day in the waters of the ocean, with one exception, the Great Bear, which alone had no share in the Baths of the ocean. To these phenomena may be added the very significant fact, that the Æthiopians, or burnt faced men, are described as living to the south of Egypt, on the borders of the Ocean-stream, at the extreme limits of the world, and that they were divided into two portions, the one towards the setting, the other towards the rising sun. From this statement may fairly be deduced the fact that Homer knew of the existence of the black races on the west, as well as the east, coast of Africa.

Eratosthenes, the father of scientific geography, pointed out that Homer was well-acquainted with the regions near at hand, but ignorant of those afar off. This conclusion, apparently so obvious, was rejected with scorn by such writers as Strabo and Polybius : in fact such a web of superstitious reverence had been woven round the great Greek Epics, that it was deemed heresy to question Homer's dicta as regards geography, history, and ethnology. This absence of critical judgment arrested the progress of true science for several centuries : it is, as if the geographers of Europe had felt themselves tied down by the occasional notices of places in the Old Testament, or the rising generation of Indians were unable to burst the shackles of Vedic, Puranic, and Sanskritic geography. Some certain conclusions can be drawn both from the notices and silence of Homer. He knew nothing of the division of the world into three continents. The union of syllables, which make up the important names of Europe and Africa had not been formed, and the term Asia is restricted to the meadows on the banks of the Cayster. On the other hand, his description of the relative position of the lofty island of Samothrace and the low island of Imbros, as seen from the plains of Troy, is that of an eye-witness of the scene. An incidental allusion to a voyage to Egypt, which Ulysses pretended to have made in the assumed character of a Cretan, though the narrative is a fiction, is obviously in accordance with ordinary experience. Menelaus mentions having visited Egypt, Phœnicia, Cyprus, and Libya, by which was probably meant the country round Cyrene. Homer abounds in descriptions of the sea, from which a large part of his *similes* were taken, but he had no idea of any sea but the Mediterranean, though it is called by no such name. There is nothing to show that he knew ought of the Bosphorus, the Euxine, the Ister, the Eridanus, the Phasis, or the Nile. In due course every place mentioned in the *Iliad*, or visited by Ulysses, was localized, and it would have been deemed a sin to doubt the identification ; but it is palpable that Homer was drawing upon his imagination, or weaving

into his story the current legends of the day, with no idea of the use which future generations would make of his poetic flights. He had some vague knowledge of nomad tribes, "milkers of mares," living beyond the mountains of Thrace; but the ominous word "Scythian" does not appear, either from the imperfection of knowledge of the poet, or, because, in the progression of races from the East to the West, that horde had not as yet appeared in the longitude of Greece and Asia Minor. His mention of Pygmies, who dwelt to the south of Egypt, by the shores of the Ocean-stream, has received a singular confirmation within the last few years from the discovery of the race of Akka dwarfs to the west of the Albert Nyauza, who were probably at that time more widely diffused. On the other hand, strange to say, his knowledge of the physical features of Ithaka, and its relative position to the adjacent islands, is vague, and not compatible with local knowledge. Not a whisper of the existence of the great monarchies of Mesopotamia had reached the ear of the Poet: not a ripple of Chaldean, or Assyrian, or Hamathite culture had disturbed the Homeric sea: and, as stated above, no trace is found of any of the legends of conquest in the far west, which had gathered round the name of Hercules; while, although Atlas is mentioned, the myth of his supporting the heavens on his shoulders had not been developed. Whatever may be the age assigned to Homer, he is justly considered as the beginning of Greek culture, and of the character above described is the geographical knowledge of which he was possessed. And it must be remembered that in such poems, with such freedom of descriptive power, and license of expression, the silence of the poet upon the subject of existing political, and remarkable physical phenomena implies an ignorance of them on his own part, and therefore of his hearers.

One of the first prose writings in the Greek language is the geographical treatise of Hecataeus, which was probably published before the end of the sixth century before the Christian era. The work was named *Periodus*, or *Description of the Earth*. Unfortunately it has perished, and all that we knew of it is collected from fragments quoted in the works of later writers, which have been lately brought together and published by Muller in his *Fragmenta Historicorum Græcorum*. Allusion must here be made to the unhappy literary fate of this, and many other of the esteemed early writers: All that we know of them is from fragmentary quotations, or translations of quotations; made by honest, but unsympathetic, successors, for whose accuracy we have no guarantee, and who, as often as not, were hostile, carping and jealous: it is as if all our knowledge of the histories of Clarendon and Hume were preserved in quotations

6 *The Geography of the Greeks and Romans.*

made by Macaulay. Now knowledge is progressive, and the later writers, standing upon the foundations painfully laid by their predecessors, and profiting by the yearly widening circle of discovery, were not fair judges of the merits of the men who had gone before them : at least they were honestest than many authors of modern time, who appropriate the knowledge, without quoting the name, of their authority.

Between Homer and Hecataeus there had been a great widening of the horizon. In the poet Hesiod, or the works existing ascribed to that poet, appear the names of the Scythians, the Tyrrhenians, (though the name of Italy is still unknown), the Hyperboreans, or dwellers beyond the North-Wind, and Mount Cætna. In two lines of the so-called Homeric Hymns we have for the first time the use of the word Peloponnesus, and of Europe in a narrow signification : but about this time the Greeks began to send out colonies, and we may reasonably presume that colonization was preceded by a certain amount of geographical knowledge : therefore the existence of a colony at a particular date is a measure of that knowledge. We find, that in a very brief period the Greeks of the Coast of Asia Minor, and Hellas, in a kind of generous rivalry, had thrown a girdle round the Mediterranean and the Euxine seas, with few exceptions pushing aside their Phœnician and Carthaginian predecessors. In this manner sprang into existence the colonies in Sicily, on the east and west coasts of southern Italy, where they were opposed by the Etrurians ; the islands of the Adriatic, Spain, where they were opposed by the Phœnicians, and that part of Africa which was known as Cyrene. In the islands of Sardinia and Corsica they were unable to secure a footing. In Egypt they were allowed by the favour of Psammetichus to establish a factory at Naucratis on the Canopus branch of the Nile : a colony was established at Byzantium, destined to be one of the empire-cities of the world ; the adventurous Milesians had pushed on to the foot of Mount Caucasus, and occupied the mouths of the great northern rivers which flow into the Euxine, or the Cimmerian Bosphorus. Curiosity and love of enquiry seem to have urged travellers to visit foreign countries, and among the earliest of this class was Pythagoras, who certainly visited Egypt about 550 B.C. Still everything beyond the basin of the Mediterranean was entirely unknown to the Greeks, or known only by the reports of other nations. No Greek navigator had ventured beyond the Pillars of Hercules, or found his way to the Red Sea : whatever rumours were current about Cæthiopia, or India, must have reached the Greeks through the Egyptians, the Phœnicians, and, later on, the Persians. For a new factor had been introduced into the problem. The conquest of the Greek cities of Asia

Minor by the generals of the great Persian monarchs had let in a new flood of light; the Milesians and Samians became subjects of a monarch who resided in Mesopotamia, and this must have opened to the conquered a new and wonderful world. Darius conducted an expedition against the Scythians, crossing into Europe:—Soon afterwards began the Persian war, and the Greek citizen became aware of kingdoms, and cities, and races, and languages, of which Homer had never dreamt. Over and above all, the Greeks had borrowed from the Phœnicians the great power of alphabetical writing, and the existence of this power is proved by the names of the Greek mercenaries of Psammetichus scratched on the rock-monuments of Abu Simbel in Nubia. The path of progress and discovery had thus been fairly entered upon, and the isolation of nations was no longer possible.

Physical science and astronomy, without which the most rudimentary geography would be impossible had also advanced:—Anaximander in the first half of the sixth century before the Christian era is reported to have drawn the first map of the earth's surface, and to have introduced the use of, if not to have invented, the gnomon, or primitive sun-dial, which plays such an important part in the progress of geographical science, as the only means known to the Greeks for determining terrestrial latitudes. Pythagoras arrived, on purely theoretic grounds, at the most important conclusion that the earth was of a spherical form, and, when we consider the view even to this day of many Asiatic nations on this subject, we may indeed bow in homage to the great Grecian philosopher who enunciated this mighty idea, so contrary to the evidence of the senses. He also, for convenience sake, divided the globe into five zones, the Equatorial, the Arctic and Antarctic, and the two Temperate zones.

Hecatæus, at whose time we have now arrived, was a native of Miletus. His work was intended, in one way or another, to comprise a general but complete review of all the countries known to the Greeks. By the irony of time the greater part of such an invaluable treatise has come down to us in the disjointed quotations of a later grammarian, who arranged the names in alphabetical order for purposes having no relation to geography. He had travelled much, had consulted merchants and travellers; from his fellow citizens, and his neighbours, the Phœceans, he could glean intelligence of half the inhabited world. He shared in the ill-fated revolt of his own city against the Persian king. In one book he described Europe, a word, which then received its full meaning, in the other Asia, which included Egypt, Ethiopia, and the rest of what is now called Africa. From him we hear first of the Caspian Sea, of India, and the River Indus, and a vague notion

8 *The Geography of the Greeks and Romans.*

of the Persian Gulf. It is remarkable that he mentions neither Babylon, nor any of the great cities of the basis of the Euphrates, nor Rome. His Map of the World is the first of the series of Epoch-Maps; it is surrounded by the circumfluent ocean. It was an article of faith with the Greeks that their country was in the centre of the world, and Delphi the very navel, just as, centuries later, an equally ignorant community were led to believe that Jerusalem was the centre of the universe, and all other countries were symmetrically arranged round it. The mind of the Greeks had a scientific and a symmetrical tendency, and made no difficulty in assuming what seemed to be required to meet that tendency, and in considering Europe to be equal in size to the rest of the world.

In the interval betwixt Hecatæus and Herodotus, the poets, Æschylus, and Pindar, wrote their immortal verse. We must not judge the description of poets with too critical an eye, or ask for the rock to which Prometheus was attached, or test too closely the wandering of Io: but in the Persæ occur for the first time the names of the great cities of Susa, Ecbatana, and Babylon, and we hear of the Parthians, and Bactrians. Pindar considers the Pillars of Hercules, the Phasis and the Nile, as figures expressive of the ends of the earth.

The works of Herodotus have survived to our times, and form an epoch in geography as well as history; but we must recollect that it was not a systematic treatise, and we must not infer from his silence that he was ignorant of any region: for instance, he scarcely alludes to Carthage and its dominions, as not coming within the scope of his work; nor are we entitled to say that he had never heard of the great name of Rome, but at least it never appears on his pages. His work was written in the latter half of the fifth century before the Christian era, and is too well known to require much comment. He had travelled a great deal, and writes as an eye-witness: he had made inquiries of competent witnesses, and records their testimony: he had an opinion of his own of what seemed probable or ridiculous: he takes a comprehensive view of the size and configuration of the world in a practical manner, so that even his mistakes are not contrary to common sense, but due to imperfect information, or incorrect deductions. He had satisfied himself that Africa, which he only knows as Libya, was surrounded by the sea, as it had been circumnavigated in the time of Necho, king of Egypt, and he considered that Scylax had discovered the greater part of Asia from the river Indus to the Arabian Gulf. But the limits of Europe were to him quite unknown: He gave up the idea of the circumfluent ocean, and

the Hyperboreans. From him we first hear of the Keltoe, and of tribes beyond, and North of the Scythians, and his account of the Cimmerians is the first authentic record of the great movements of nations that have taken place in all ages from Asia into Europe. He writes of these nomads as real, and no longer fabulous, personages: He describes their customs, and mentions one tribe with a peculiar language, who were cannibals, a custom unknown in this part of the world; in this tribe we have no doubt an indication of the Finnic race; beyond them were the Sauromatæ or Sarmatians, the ancestors of the great Slavonic stock, who overpowered the Scythians: beyond, again, was the limit of the positive knowledge of the historian, who describes races of men as having the feet of goats, probably being active mountaineers, and hibernating for the six cold months, after the manner of the Lapps, and eating the bodies of their deceased parents, as is the practice to this day among the Batta in Sumatra; but even he could not swallow the story of the Griffins and Gold of the Arimaspians.

Proceeding southward it appears clearly that his knowledge was limited to the confines of the Persian kingdom. Of Arabia he had only a vague knowledge, but the navigation of the Red Sea was established, and commerce supplied not only the frankincense, and myrrh of Arabia, but cinnamon and cassia of a country far beyond, either India and Ceylon, or the so-called cinnamon, region of Africa. He alludes to tides, a phenomenon, with which the Greeks were not familiar in their own inland sea, and he uses the word "Atlantic" for the outer sea in one solitary passage. To Herodotus we are indebted for all we know about the voyage of Scylax from the mouths of the Indus to the Arabian Gulf, from him we hear first of the cotton, or tree-wool, and the bamboos of India, and the famous story of the gold thrown up in large heaps by ants, as large as foxes, and carried away by Indians mounted on swift camels, but no allusion is made by him to elephants.

With regard to Africa his information will to all time be deeply interesting: he had no conception that beyond the southern desert there existed any region fit for the habitation of man: to the limits of Egypt he had himself penetrated, and by inquiry he had fixed the position of Meroe, the capital of the Ethiopians: beyond that the Nile was said to flow from the West, or setting sun, but no one knew any thing of the source. In one vague allusion, intelligible only in the light thrown upon it by subsequent discoveries, he raises the dark veil which shrouded Negroland from his generation: he narrates, without suspecting the deep importance of his story, how five youths penetrated across

10 *The Geography of the Greeks and Romans.*

the Sahára to the valley of the Niger, which he fondly connected with the Nile. It is to be regretted that he excluded the Carthaginian dominions from his description, and therefore all the north coast of Africa, west of the Syrtes. He picked up something from Carthaginian traders, and the only name outside the Pillars of Hercules quoted by him is that of Cape Soloeis, or Cape Cantin in Morocco. In considering the reason why the interior of Africa was thus secluded from the active and intelligent nations which dwelt upon its coast line, and along the great Nile basin, we must recollect the now well-established fact, that the use of the camels was practically unknown in Africa until after the Mahometan conquest. They were indeed used by the armies of Cambyzes and Alexander the Great, but this use was exceptional. Amidst the heavy losses which the world has suffered from the disappearance of many noble works of antiquity, we may indeed be thankful that the fascinating journals of Herodotus, with all their faults, and shortcomings, have survived to our times.

Before the death of the great historian (though the facts never reached his ears in his retreat at Thurii, where he settled down to record his travels), Hanno, the Carthaginian, had made his famous expedition down the west coast of Africa. The document that has come down to us, is in the Greek language, and known as the *Periplus of Hanno*. Not only is it one of the few records of Phœnician and Carthaginian enterprise that have survived, but it purports to be the account of the commander himself, who was either the father or the son of that Hamilcar, who invaded Sicily, B. C. 480. With a large number of emigrants, in a fleet of sixty ships, he passed out of the Pillars of Hercules, landed at the island of Cerne, which is identified with a small island, still called Herne at the mouth of the Rio d'Oro in latitude $23^{\circ} 50'$, and proceeded thence further south to Sherboro Sand, just beyond Sierra Leone. The two remarkable features described by the narrator are the streams of fire pouring forth as from a volcano, and the capture of gorillas. They visited the mouth of a broad and large river, full of crocodiles and hippopotamus, and this must have been the River Senegal. The streams of fire arose from the conflagrations of the long, dry grass, which is kindled yearly by the natives. Such was the simple story, which our knowledge of the coast confirms at every part; but it was distorted, and rendered ridiculous by exaggerated quotations in all later geographers.

Thucydides, the historian, did not add to the existing knowledge of geography, though his descriptions are all clear and accurate. His contemporary, Antiochus of Syracuse, whose

works have not survived, left one or two fragments, and in one of them, for the first time, appears the great name of Rome. Another contemporary, Ctesias, a Greek doctor at the Court of Persia, wrote voluminous treatises ; but they have perished, and a meagre abstract by a later historian, Photius, is all that has remained of his Persian and Indian History, and it does not add to our geographical knowledge. Photius, the patriarch of Constantinople, lived in the ninth century of the Christian era, and, in his *Myriobiblion*, gives us the extracts from 280 ancient writers, and is for many, as for the unhappy Ctesias, the sole source of information. Ctesias wrote his treatises B. C. 398, so that they had survived twelve hundred years when the quotations were made. It is to be feared that he was one of those to whom Juvenal alluded as "*Græcia Mendax*," for in his hand India had become a land of marvels, and in his want of critical judgment he swallowed in any fable or absurdity current at the Persian Court ; otherwise he had rare opportunities of knowledge. He had no knowledge of the Ganges ; but he mentions elephants, though, with his usual exaggeration, he describes an Indian King marching to battle with one hundred thousand elephants, besides three thousand of superior strength and stature used for destroying the walls of hostile cities.

From him we hear of the Griffins, who guarded the gold ; of the unicorn, or wild ass with a horn ; of Pygmies, and men with dog's heads ; and this tissue of fables was repeated from generation to generation, down to the time of Pliny. Aristotle, however, more than doubted him, and Arrian quoted his testimony with reserve. Strabo refers to him as one of the writers on whom no reliance can be placed. So his worthless garrulousness was at last found out. We are not indebted to him for the description of a single custom of the Hindus.

A very different author is the next in time. The *Anabasis* of Xenophon is one of the most delightful episodes in the history of the world. A brave and prudent soldier, a refined and elegant writer, the friend of Plato, and the pupil of Socrates, he was one of those gifted few who, like the first Cæsar, have done things worth recording, and written things worth reading. As we read this famous book, and mark how discipline triumphed over undisciplined numbers, and a brave heart forced its way through physical difficulties, we feel that we have opened the handbook to victory : and, as we march across Mesopotamia, parasarg by parasang, and fight our way through Armenia to the shores of the Euxine, we feel that we must be on the eve of much greater events, and that Xenophon, by making known the weakness of the huge Asiatic kingdom, is, as he proved to be, but the

12 The Geography of the Greeks and Romans.

advance guard of Alexander. The expedition was for purely political objects, and the narrative was written from the point of view of a historian, but every general, and every historian in those days was to a certain extent in the position of a geographical explorer. Xenophon is trustworthy and intelligent in his descriptions, and we doubt not that Alexander of Macedon found more practical advantage in the copy of the *Anabasis*, which he must have studied, than in the copy of Homer which he is credited to have had always under his pillow, and which would have proved but a blind guide to the Conqueror of Asia.

Ephorus is one of the unfortunate authors, who wrote valuable works but who have survived only in fragments quoted for their own purpose by the next generation of writers. He appears to have made a general and comprehensive review of geography, devoting one book to Europe and another to Asia and Africa. He looked upon the Indians, the Scythians, the Kelts, and the Ethiopians, as the four most distant nations, taking Greece as the centre : he accepts the discoveries of Hanno, and is so far in advance of Herodotus. His contemporary Theopompus has shared the same fortune, and has but a fragmentary existence in the pages of the elder Pliny, who mentions that he is the first Greek author who notices the history of Rome and the capture of the city by the Gauls. He had a better knowledge of the Italian cities ; but he shakes our confidence in his judgment by his rash assertion that the Ister, or Danube, had a double branch, and that the Western branch discharged itself into the Adriatic. This false idea, which originated in the Argonautic legend, was not repeated by the more cautious geographers already mentioned, but from the time of Theopompus onwards for many generations became a fixed delusion, the more surprising from the physical impossibility of such an embranchment, and the comparative facility of ascertaining the existence, or not, of a great river at the head of the Adriatic.

To this period also belongs the *Periplus* of Scylax, which has come down to our times. The date of this treatise is limited within a narrow margin of time by the absence of allusion to the city of Alexandria, and the mention of certain other cities whose foundation dates are well ascertained. A *Periplus* was a kind of Marine Guide-Book for seafaring men, or tourists, describing in regular order the coasts of particular seas, and as the Greek colonies, almost without exception, were maritime, such a treatise supplied all that an ordinary Greek required to know of geography. We have the analogue of such a treatise in our modern *Tourists' Guide*. There is no possible connexion betwixt the Scylax who wrote this treatise, and the

Scylax of Caryanda, who is recorded by Herodotus to have navigated from the Indian to the Arabian Gulf in the preceding century. The author begins from the Pillars of Hercules, and follows the northern coast of the Mediterranean, as far as the mouth of the Tanais, which he considers the limits of Europe: thence he returns along the coast of Asia and Africa to the point of starting, adding a brief notice of the western coast of Africa, as far as the Island of Cerne: this last notice supplies sufficient evidence that the treatise was posterior to Herodotus. He knew nothing of Western Europe. He is the earliest *extant* author in which is mentioned the name of Rome: the previous notices were in quotations embedded in the works of later authors. He falls into the same error with regard to the second branch of the Ister discharging itself into the Adriatic. He starts the idea that below Cerne, on the west coast of Africa, the sea was choked with sea-weed and mud, and was no longer navigable, but he maintains that Africa was a great peninsula.

A greater name now comes before us, that of Aristotle. No treatise of his is devoted to geography, but in two of his treatises his remarks on the physical aspect of the science are important, as indicating the basis on which later writers constructed their edifices. He established the position that the earth is a sphere at rest in the centre of the universe, and that all the other celestial bodies revolved round it. He is the first *extant* writer who distinctly states the cosmical relations of the earth, and, though he adopts the views of some of his predecessors, he demonstrates them himself afresh. He remarks that the Tropical and Arctic zones were uninhabitable, that the Temperate zone, from the Pillars of Hercules to India, alone was known to be habitable: he adds, that there must be a temperate zone in the Southern Hemisphere, but he refrains from suggesting that it was inhabited: he treats with scorn the idea that the inhabited world was a circle, which was the prevalent idea in his day, and had been sanctioned by Herodotus. Many of his incidental geographical statements are quite wrong and confused, but he agrees with Herodotus that the Caspian was an inland sea, and this saved him from an error which clung to his successors for many centuries.

To the same period must be dated the famous myth of Atlantes, as shadowed forth in the *Timæus* and *Critias* of Plato. It would not be worth noticing, as merely the creation of the philosopher's brain, had it not gained a hold upon the Greek mind, and the reputed shallow and muddy nature of the Western Ocean was supposed to arise from the subsidence of this imaginary island. It was no doubt in the interest of the Phœnicians and Carthaginians to report these seas as unnavigable. The Carthaginian Himilco

14 The Geography of the Greeks and Romans.

is reported by Pliny to have made a voyage northward at the same time that Hanno made his southward, and to have found his progress checked by the heavy and sluggish nature of the sea, and the quantities of sea-weed which obstructed the motion of the ship; so that there may have been a basis on which all these legends rested.

The expedition of Alexander the Great from Macedon to Babylon, and thence to Transoxiana and the Panjab in Northern India, threw open Asia to the astonished eyes of Europe, and caused a revolution in geographical knowledge. It is only within the last quarter of a century, that we have been able to bring the narrative of Alexander's campaigns to the test of local inquiry, and even now there are some details left unexplained. The great fact stood out for ever in history, that he had marched by land to the banks of the River Beas, in the Panjab, that he had descended the streams of the Indus, and one or more of its confluent, and found his way to the Indian Ocean, whence Nearkhus with the fleet had navigated the sea to the Persian Gulf, and the king himself had conducted the remnant of his army back by the coast line to Babylon. It was one of the great epochs of the world; and the human race never settled down on their old lines again. Had the great king lived, perhaps further extension of knowledge would have followed, but his mantle fell upon less ambitious successors. We have next to consider what documents we have to record these mighty transactions, and it is clear that all contemporary record has perished. Arrian is the most trustworthy historian at second hand. He lived in the time of the Antonines, in the second century of the Christian era, and five centuries after the events which he narrates, but he follows mainly, if not exclusively, the narratives, which have since disappeared, of Aristobulus, and Ptolemy, the son of Lagus, both of them companions in arms of Alexander. He was, moreover, a soldier himself, a governor of provinces, and the author of other works which display a special turn for geography. Although Plutarch, Diodorus Siculus and Quintus Curtius, all flourished at a date anterior to Arrian, and treated the same subject, they followed the authority of Clitarchus, who, though a contemporary of Alexander, was not a writer of judgment; and the works of the three Roman authors who followed him, are not so highly esteemed as authorities as Arrian's history of the expedition.

But that same author has left another work, his *Indian History*, a portion of which is admitted to be a compendium of a work written by Nearkhus himself, who conducted the fleet of Alexander from the Indus to the Persian Gulf. This is a most important contribution to geographical knowledge, and it is only

in modern times that its correctness has been tested. It is stated that Alexander contemplated the circumnavigation of the peninsula of Arabia; and no doubt Nearkhos would have accomplished it, for there were no insuperable obstacles, but Alexander's death arrested all such great designs; and a heavy misfortune it was, for five hundred years later on Arrian records that no mortal ever dare venture on the enterprise by reason of the vast heat of the sun and the desert shores; that the country must be uninhabitable; that no one had ever got so far as the extreme point of the Persian Gulf to the spot sighted by Nearkhos on his expedition from the Indus, and that, had these seas been navigable, Alexander would not have left them undiscovered.

The successors of Alexander the Great contributed notably to geographical discovery. The works of Megasthenes have unfortunately perished; but large extracts have survived in the works of Pliny, Diodorus, Arrian and Strabo, and they contain matters of great interest regarding India. Few embassies have been so important as landmarks in history as that of Megasthenes, ambassador of Seleucus Nikator, king of Babylon, to Sandracottus or Chandragupta, of the great Mauryan dynasty, king of India, at his capital of Palibothra, now Patna, on the Ganges. We here touch ground in Indian chronology, and on this pivot turns a cycle of events of the greatest importance. Megasthenes was probably the only Greek who penetrated so far into India. His route is easy to follow. He crossed the River Satlaj, beyond the point where Alexander the Great turned back: he must have seen with his eyes the magnificent snowy ranges of the Himalaya, or Indian Caucasus: he passed into the basin of the Ganges by the road of Sarbind; crossed the Jamna; worked his way to the junction of the Jamna and Ganges, and he identifies the capital by placing it at the junction of the Ganges and the Erannoboas: in the latter name we recognize the Sanskrit *Hiranya-bahu*, or golden-armed, another name for the Sone, which also means gold. He knew little or nothing of the course of the Ganges south of Palibothra, or of the mountain ranges or table land, or in fact of anything beyond the basin of the Indus and the Ganges. And this is the more remarkable as from the inscriptions erected by Asoka, grandson of Sandracottus, it is known that his kingdom extended south of the Vindya range to Cattack on the east coast, and Gaujam on the west. His estimate of the extent of India was sober, and he had definite information regarding Ceylon, but he knew nothing of the peninsula of India. We learn from Strabo that another ambassador, Daimachus, was sent by Seleucus to the son of Sandracottus, and wrote an account of his journey which has perished. A work of Patrocles, governor of the frontier provinces of India, is

16 The Geography of the Greeks and Romans.

quoted by Strabo, as having been considered by Eratosthenes more trustworthy than Megasthenes. Pliny mentions a work by Dionysius, an ambassador sent to one of the Indian kings (a vague term), by Ptolemy Philadelphus, king of Egypt, probably by the sea route. After this a cloud falls upon India, and there was no more communication with Europe for centuries. But at a period anterior to the invasion of Alexandria, by some means or other, the unique invention of the Phœnician alphabet, passing through intermediary derivatives, either by sea or land, had found its way to India, and given birth to the two forms of the Asoka alphabet which are the groundwork of all the characters of writing of Nearer and Further India. For one strange error, which disfigured geography for many generations, we are debtors to Patrocles, who is reported to have asserted that it was possible to sail round India to the Caspian Sea, which was in fact merely a gulf in the ocean, and this error appears in the maps of Strabo.

In the meantime the Ptolemies were founding cities, and encouraging commerce down the west side of the Red Sea, and the inscription of Adulis in Abyssinia testifies to the fact that elephants were there trained for war. A line of stations extended to the Straits of Babelmandeb, and beyond to the Southern Horn of Africa, or Cape Guardafui, which produced not only myrrh and frankincense, but cinnamon, whence it came to be known to geographers as the "Land of Cinnamon." Each explorer put up a stela to commemorate his furthest point of advance. A commerce, no doubt, existed in Indian commodities, but there was no direct trade with that country. The Sabæans on the opposite coast of Arabia acted as intermediaries betwixt India and Europe. It is a fact that neither Eratosthenes nor Strabo, who wrote at a later date, had any knowledge of India, except through the writings of Megasthenes and the contemporaries of Alexander. One writer left a valuable record, which, though it has long since perished, was praised by the highest geographers, and copiously quoted. This was Timosthenes, an admiral under Ptolemy Euergetes, who drew up a practical description of the ports of the Mediterranean.

The generation succeeding to that of Alexander heard a new name, that of the Island of Britain. Herodotus had heard of the Cassiterides, but they were generally placed off the coast of Spain. A writer named Pytheas, a native of Marseilles, left a treatise giving an account of his own voyages, and describing other countries, of which he had hearsay report. His work has perished, but it was quoted by Eratosthenes, which fixes the date. He is also quoted by Polybius. He had visited Britain, and

Iberia, and had heard of the Island of Thule and the Teutoni. He is reasonably supposed to have penetrated by sea as far as the mouth of the River Elbe. He thus largely added to the Map of Western Europe. He was a good astronomer, and fixed the latitude of Marseilles with fair correctness. He described Thule as lying within the Arctic circle, and he must, therefore, have heard of the phenomenon of continuous day at the summer solstice. He was the first to connect the tides with the moon. An author named Theophrastus of this period, though writing upon the wonders of Nature and Art, mentions incidentally the Rhine, as being frozen hard in the winter like the Ister, and flowing to the land of the Germans. He also first notices the existence of beautiful islands beyond the Pillars of Hercules, which filled so large a part of the interest of the next generations, the Fortunate islands; and the one more particularly described by him was no doubt Madeira.

We are now arrived at a period, the latter half of the third century before the Christian era, when the accurate and philosophic Greek mind would no longer be satisfied with the journals of travellers, the itineraries of generals, the stories picked up from the mouths of sailors, the estimated distances by land or sea. There was a severe side of geography, to which astronomical science could be applied, and aid in tabulating the collected information, and reducing it to scientific form. Eratosthenes was the librarian of Alexander, and had access to the accumulated stores of knowledge, and among them to the Septuagint, which contains certain striking geographical details. All his voluminous works have perished, and he lives only in the quotations and severe criticisms of Strabo. Maps no doubt did exist: the object of Eratosthenes was to reform the map of the world, as it had existed down to his time, and to reconstruct it on scientific principles: hence he has been justly called the father of scientific geography. We must recollect how inadequate the means were at his disposal, and how imperfect the data: this causes us more to admire his wonderful sagacity and sound judgment; so sound, indeed, that he proved to be more judicious in his inferences than many of his successors of two centuries later, in spite of their far greater opportunities for generalising.

Aristotle and Euclid, had established beyond controversy the position and figure of the earth: the obliquity of the sun's course had not escaped notice, and the great circles of the equinoctial and ecliptic, or zodiacal, circle, as well as the lesser circles of the tropics, parallel with the equinoctial, were known, and these conceptions had been already transferred from the celestial to the terrestrial globe. Eratosthenes made a careful and success-

18 The Geography of the Greeks and Romans.

ful measurement of the circumference of the terrestrial globe. It was an obvious problem based upon the spherical form of the earth, and had been attempted at a time even anterior to Aristotle, but neither the method nor the data, of these early measurements are supplied, nor did the result approximate so nearly to the truth as the calculation made by Eratosthenes, who, assuming Alexandria and Syene to be on the same meridian, at a known distance from each other, measured the shadow of the gnomon at each to determine their latitude, and concluded that the arc of the meridian intercepted between the two was one-fiftieth part of the great circle. But his data were in every factor frightfully erroneous : his calculation, however, came surprisingly near the truth, as by his measurement the circumference of the globe amounted to 25,000 *geographical* miles, while in fact the circumference at the Equator is a little short of 25,000 English miles.

The *habitable* world, as distinguished from the surface of the globe, was in his time very limited, as he knew nothing of the teeming millions of undiscovered regions. Excessive cold to the north, and excessive heat to the south, seemed an impassable boundary, and as to the southern tropics, and temperate zone he thought no more about them than we do of the inhabitants of the Moon. His great object was to determine the length of the long narrow map of the habitable world. He proceeded to show, that the length was more than double the breadth, and was rather more than one-third of the circumference of the globe : the remainder he considered to be occupied by sea, and his intellect was sufficiently clear and enlarged for him to remark that one might sail from Spain to India along the same parallel of latitude. In fact this great man predicted, as a matter of theory, the circum-navigation of the world, though it seemed a thing as practically impossible as a journey is now to the moon.

He then proceeded to lay down a main parallel of latitude, passing through certain points, *viz.*, from the sacred promontory, the westernmost point of Iberia, through the Pillars of Hercules along the whole length of the Mediterranean to the Island of Rhodes, and thence to the Gulf of Issus. Hence it was prolonged along the southern foot of Mount Taurus, which he conceived as preserving a uniform direction from west to east, and continuing under the name of Caucasus along the northern frontier of India, until it ended in the Indian or Eastern Ocean, beyond which there was nothing. Now the value of such a parallel depended upon correct observations of latitude taken all along it : there was no means of taking such observations correctly, and none existed, except in a few cases.

The parallel was supposed to pass betwixt Sicily and Italy, and

the southern extremity of the Peloponnesus : and this mistake was continued by all geographers down to the time of Ptolemy, showing how little attempt was made to verify data in places so familiar to both Greeks and Romans. Nothing either was known of the projection on the African Coast, and, by delineating that coast line of a nearly uniform direction from east to west, a great displacement necessarily took place of Sicily, the relative position of which to Africa could not but be well known. A meridian line of longitude was drawn through Alexandria and Rhodes, extending southward through Syene and Meroe, and northwards through Byzantium to the mouth of the Borysthenes. These data were far from correct, and yet Eratosthenes showed a clear comprehension of the problem which presents itself to the scientific geographer. There is an entire absence of an accurate knowledge of longitudes, or of any means of ascertaining them approximately, as they had very imperfect means of marking the measurement of time. Hipparchus, who will be mentioned further on, had the sagacity to point out that the observation of eclipses might be applied to the object, but we find that, three centuries later, in the time of Ptolemy, scarcely any observation of this kind was available. This was a fatal shortcoming in the preparation of a correct map. Even the measurement of ordinary distances by sea or land was of the rudest description, and unfit to be the basis of calculation.

Accepting the existence of Thule, he made that his most northerly parallel. He mentions Britain, but had never heard of Ierne. His most southern parallel passed through the land of the Sembritoë on the Upper Nile, which he prolongs through the land of Cinnamon to Cape Guardafui, the most southerly point on the east coast of Africa known to navigators. He further prolonged the parallel through Ceylon without any apparent authority for so doing. He had absolutely no knowledge of the existence of China, or rather of trans-Gangetic Asia. He was the first to mention the name of the Nubians, as occupying the country on the west of the Nile from the neighbourhood of Meroë : they are described as a great nation, and not subject to the Æthiopians of Meroë. This name is not found in Herodotus, and the inference is that the immigrations of the Nubian race, which is distinct from the Æthiopian, as well as from the Negro, found their way from the west to the Nile basin in the interval of time that elapsed betwixt Herodotus and Eratosthenes. This is an ethnological fact of some importance. As stated above, he had thrown off the blind reverence for the geography of Homer, and in this particular also he was in advance of succeeding generations. He had also arrived at sound views as to the causes of the inunda-

20 *The Geography of the Greeks and Romans.*

tion of the Nile, which could not escape his notice, as he spent his life in Egypt.

Eratosthenes was not esteemed at his full deserts by his immediate successors : it is only in modern times that the soundness of his conclusions has been substantiated. The great astronomer Hipparchus, who lived a century later, wrote a treatise which has been lost, to criticise these conclusions. All that we know of it is from quotations in Strabo, who was not an astronomer. He had clearly conceived the idea that in a map every point should be laid down according to its latitude and longitude determined by astronomical observations ; but such a method was impracticable, and continued to be so as late as the time of Ptolemy. He conceived the idea of dividing the circle into 360 parts, or degrees. He carried out a further theoretic division of the habitable world into "climata," or zones, by lines parallel to the Equator, for each of which he indicated the length of the longest day. He admitted the existence of Thule, where the solstitial day was twenty-four hours long. As an astronomer, he knew that this would really occur in the Arctic Circle, and consequently more readily admitted the statements that it had been actually observed, which, if the identification of Thule with the Shetlands be correct, was an error. He refused to admit, that the habitable world was surrounded on all sides by sea, grounding his dissent on some scientific view regarding the tides : he clung to the old error of supposing that the Ister had a second arm flowing into the Hadriatic, and, in spite of his great learning, he went back to the old world view of the accuracy of the Homeric geography. It seems strange to contrast such ignorance of the nearer horizons with the knowledge of the further acquired by this great astronomer, who discovered the precession of the equinoxes, calculated eclipses, determined the revolutions and mean motions of the planets, and prepared a catalogue of the fixed stars.

In the meantime the conquests of the Romans had opened the way to a more complete knowledge of Europe, and in the pages of the historian Polybius, which have come down to us, we read the results. He had peculiar opportunities of information, for, a Greek by birth, he had been sent to Rome as a hostage after the second Macedonian war, and attached himself to the person of Scipio Africanus, the younger, and was present at the destruction of Carthage. He states that he made long journeys through Gaul, Spain, and Africa with the object of ascertaining their geographical position. His narrative ends with the taking of Corinth B. C. 107, but as the author lived twenty years longer, the latest date of his geographical information may be placed at 130 B. C.

The Geography of the Greeks and Romans. 21

He had devoted one volume to Geography, but it is lost, and only known to us by citation in Strabo ; however, in his history he clearly was fully alive to the importance of correct geographical statements. From him we hear, for the first time, of the Pyrenees and the Alps : over the latter he describes the pass traversed by Hannibal and three other great passes. He had sound views with regard to the Hadriatic, and describes the Egnatian way which connects that sea with the *Ægean*. He had visited Byzantium, and describes the advantages of the position of that city ; he had good information regarding the Euxine Sea, the Palis Mæotis and the so-called Cimmerian Bosphorus, which united them. He mentions incidentally the establishment of the Gauls, or Galatians, in Phrygia, which is an interesting ethnological fact. In Africa, owing to the conquest of Carthage, and the alliance with Massinissa, king of Numidia, his knowledge had been greatly enlarged. Pliny mentions that he made an exploration beyond the Pillars of Hercules down the west coast of Africa, but this part of his narrative has perished, and Pliny's allusion to it is very indistinct.

While the progress of Roman conquest was enlarging the knowledge of Europe, the knowledge of Eastern Asia was on the way to extinction by the rise of the Parthian monarchy, which, by the occupation of Mesopotamia, placed an insuperable barrier to all further progress. The Greek settlements of Bactria and India were cut off for ever, and gradually succumbed to more powerful invaders. There may have been an intercourse across the Continent by caravans, but from this time forward India was a sealed book to Europe, except as far as scanty information reached by the way of the Red Sea. Strabo quotes from other Greek authors, such as Appollodorus, the grammarian, who wrote a commentary on the catalogue of ships in the *Iliad*, and a geographical treatise in Iambic verse, possibly to assist the memory in places of education. He mentions also Demetrius of Scepsis, who wrote a treatise in thirty books upon the catalogue of Trojan allies. He lived near the reputed site of Ilium, and was the first to doubt its identity with the Homeric city ; and both he and Apollodorus mistrusted the Geography of Homer. To him succeeded Agatharchides, the author of several geographical treatises, known to us only by their mention by the patriarch Photius in his *Myriabiblion*. He was tutor to king Ptolemy Soter II., about 120 B C., and had every opportunity of informing himself with regard to the Red Sea, and fortunately Photius has made an abstract of both these books. His notices of the Ethiopian tribes in the interior of Africa are quoted by all subsequent authors. To him succeeded Artemidorus, who lives only in the quotations of Strabo. He appears to have been highly esteemed, to have

22 *The Geography of the Greeks and Romans.*

systematised existing knowledge, and to have been accurate in details of distances and dimensions. Scymnus Chius, in the last century before our era, has the credit of having composed a little compendium of geography in Iambic verse, which has come down to our time. It is only a long fragment of a much greater work, and it is stated that it was composed in Iambics to help the memory. It is a worthless production, as the author consulted authorities of all periods, and instead of representing the geographical knowledge of his own day, has left a jumble of confused statements. In addition to these mere compilers of the knowledge of others to this period can be credited one voyage, made solely for purposes of exploration, the narrative of which is found in the fragments of an author named Posidonius, quoted by Strabo. Eudoxus, a native of Asia Minor, happened to visit Egypt, and met an Indian captive, who had been wrecked in the Red Sea. Under the guidance of this man, Eudoxus made two voyages to India, and brought back a valuable cargo. He also penetrated to a certain point down the east coast of Africa, but no particulars are given. He also made a voyage down the west coast, but the narrative of Posidonius breaks off abruptly. The only fact recorded by him is that the languages spoken by the Ethiopians visited by him, both of whom were certainly north of the Equator, were the same: this fact can be predicated to a certain extent as true south of the Equator, but, unless there is a great displacement of races, not of the north. The inference formed by both Eudoxus and Posidonius was that Africa could be circumnavigated. The evidence hardly supported this sanguine statement, but we see how clearly both the great discoveries of later years, the circumnavigation of Africa, and the globe were distinctly anticipated by writers before the Christian era.

Geographical discovery still followed, as the handmaid of the Roman conquest: Sallust's account of the war with Jugurtha, supplies us with a certain amount of information regarding Africa. At this time we hear, in Plutarch's life of Sertorius, of the Atlantic Islands, known fancifully in the poets and the imaginations of the ancients, as the islands of the Blest, or the Fortunate Islands, which can be identified with Madeira and the Canary Islands. The campaigns of Pompey and Lucullus in Spain and Asia Minor had opened out new routes and revealed the interiors of new countries. Lucullus led the Roman arms for the first time across the range of Mount Taurus, the rivers Euphrates and Tigris, and reached the eastern limits of the Empire. For many centuries Mesopotamia became the battle-field of the Romans and their neighbours, the Parthians and Persians, and Armenia was again opened out to the ex-

plorer. Judæa and Jerusalem were now occupied. All these wars were narrated by Posidonius, a philosopher of distinction, and a friend of Cicero and Pompey. All his works have perished, but he is the author to whom Strabo most frequently refers, as his authority on geographical details. He made an independent attempt to determine the circumference of the earth on scientific grounds, based on the comparative altitude of the star Canopus at Alexandria and Rhodes; the conclusion he arrived at, was not very wrong, but his data as to the latitudes of the two places, and their distance from each other were egregiously incorrect, though the errors corrected each other. Unfortunately he was led to correct one side of his calculation, and in consequence to reduce the circumference of the world to three-fourths of its actual dimension, and by a strange fatality this conclusion was accepted by all later geographers, and even by the great astronomer, Ptolemy. It is curious to find Posidonius, like his predecessor Eratosthenes, remarking that any one setting out from the west with an east wind would sail to India. He was the first Greek writer, who had a clear idea of the tides, which he ascribes to the moon; and from him we learn that tin was brought across France from Britain to Marseilles.

The commentaries of Julius Cæsar, like the *Anabasis* of Xenophon, is one of the books which the world would not willingly have lost. It reveals to us Gaul, Britain, and a portion of Germany. A Roman army reached the Rhine, and crossed the Straits of Dover, and we hear for the first time of the River Thames. He ascertained the fact that the nights in the later summer were shorter in Britain, the climate more temperate, and the cold in winter less severe, than in Gaul. He remarks the fact that in his time the Germans were perpetually pressing upon the Gauls, and tending to establish themselves across the Rhine, contrary to what had been the tendency previously. In the eastern campaign of Antony, we find the first notice of Palmyra. The Roman Empire was now completed under Augustus, and there was no escape for a Roman citizen beyond these limits. The mountaineers of the Alps had been gradually subdued. The Ister was the northern boundary, and Tomi, to which place Ovid was banished, was the outpost of civilization. Beyond were the Dacians, the Bastarnæ, and the Sarmatians, nomads, and only half-civilized, and their geographical limits imperfectly ascertained. The Rhine was the boundary of Gaul. No attempt was made to invade Britain. In Asia the Euphrates had become the boundary. The Emperor Augustus received an embassy from a king of India, about (B. C. 20). It is mentioned by Strabo and Dion Cassius and other later writers.

24 *The Geography of the Greeks and Romans.*

Two naked facts are recorded, that they brought with them a living tiger, the first seen at Rome, and that one of their number, Calanos from Barygaza, now Bhroch on the west coast, burnt himself alive at Athens upon some philosophic principle. Whether this embassy came by land through Parthia, or by sea, is disputed. Augustus in the Ancyrean tablet mentions that repeated missions had been sent to him from India; and Nicolaus of Damascus, whom Strabo quotes, states that he had himself seen and conversed with the envoys. He was a contemporary of Strabo, and the fact of the embassy must have been notorious, and cannot be gainsayed.

The Romans had heard about this time, in a vague manner, of China. Silk had found its way to Rome, and become an article of luxury. A line in Virgil's *Georgics* is the earliest allusion to the Seres, and it conveys a clear, though mistaken allusion, to silk, and the material of which it was composed. Whether this silk found its way by sea or by land, we cannot say. Until the time of Pliny it was believed that the silk was stripped from the leaves of trees, and it looks as if the country of Serendip and the cinnamon bark were indicated.

It is rather a surprise to find that no Roman authors of note devoted themselves to geography, or felt an interest in describing the empire which their arms had won. Cornelius Nepos and Sallust paid attention to the geographical portion of their works, but made no extension to our knowledge. The most important contributor was Juba, the second of the two kings of Numidia, in North Africa. He had been brought up at Rome and became the friend of Augustus, who restored to him his father's dominions. He availed himself of his great opportunities to write a description of Africa, which has unfortunately perished, but is frequently cited by Pliny, who clearly made more use of him than these citations. Of the interior he knew little or nothing, and a specimen of his knowledge is his wonderful theory of the source of the Nile in a mountain of Mauretania, whence it flowed for many days underground. He had made diligent inquiries regarding the Fortunate Islands, and mentions among their names Canaria, which he fancifully derives from the abundance of dogs on it. It is remarkable that Strabo had never heard of Juba's treatises. Whether he wrote in Greek or Latin, is uncertain, probably the latter.

But the Romans constructed roads in every part of their dominions, put up milestones, and drew up itineraries, which must have been remarkable additions to geographical knowledge. None of those constructed at this date have come down to us, but there is no doubt that they existed. M. Agrippa, the friend

of Augustus, caused a map of the whole world, as then known, to be set up in the portico of Octavia at Rome, with a detailed statement of the distances and the area. Pliny speaks of this in high terms of admiration. This was not the only instance of a map on the walls of a temple; and we gather from a line of Propertius, that at schools maps were painted on boards, and that geography was considered to be part of the education of Roman youths. Augustus ordered a census to be made of the population of the empire, and this must have led to the accumulation of much statistical information. In this reign Ælius Gallus made his celebrated expedition into Arabia, which is recorded by Strabo. Petronius invaded Ethiopia, and defeated Queen Candace: this is also recorded by Strabo. Cornelius Balbus conducted an expedition into the interior of Africa against the Garamantes, and penetrated as far as the modern Ghadamis and Fezzan.

Pliny gives a full account but it is remarkable that Strabo, though he alludes to the triumph of Balbus, has no detailed information. Dion Cassius is also silent; but Virgil, in his famous line in the sixth Æneid, has made the name of the Garamantes, a convenient word for his metre, famous to all time. Drusus, the step-son of Augustus, was the first who conducted the Roman armies to the River Elbe: after his death his brother Tiberius advanced by land to the Elbe, while the fleet sailed round to the mouth, and ascended it: this was their first appearance in the Northern Sea, and Augustus alludes to it in his Ancyrean tablet. It is not clear whether the Cimbrian promontory, or Jutland, was then discovered. However, the defeat of Quintilius Varus, and the destruction of three legions somewhere in Hanover, changed the whole aspect of affairs, and was never retrieved. Though Germanicus, nephew of the Emperor Tiberius, earned a great reputation, and asserted that he had subdued all the nations between the Rhine and the Elbe, as a fact, he himself never reached the Elbe.

Passing by Diodorus Siculus, who added nothing to geography, we come to the great work of Strabo, which has survived to our time, and is the greatest work of antiquity, both in its conception and execution. It represents the high level mark of geographical knowledge at the time of the death of the Emperor Augustus, and the completion of his task of consolidating the Empire. Strabo was a Greek, of the town of Amasia, in Pontus in Asia Minor: he was probably educated at Alexandria or Rome: he visited Greco, Italy, and Egypt; he accompanied Ælius Gallus in a voyage up the Nile to Syene and Philoe. On his return to his native city he composed a great historical work, and, when that was completed, he commenced his geographical treatise, which he describes as colossal. It was not actually completed

26 *The Geography of the Greeks and Romans.*

till A. D. 19. His residence in so remote a city as Amasia in Pontus may account for contemporary works, such as that of Juba, having escaped his knowledge, and will also explain the comparative neglect with which his work was received, as it is not even alluded to by Pliny, who lived half a century later. We may indeed be thankful that it has come down to us, as it is one of the most important works produced by any Greek or Roman writer. It was the first attempt at a general treatise on geography, as he conceived the idea of mathematical, physical, political, and historical subdivisions of the subject. It is a remarkable phenomenon that Strabo accepted as truth all the legendary Homeric geography, and treated the works of Herodotus with contempt. When he differed from Eratosthenes, he was generally wrong : he was too hasty in rejecting Pytheas. Singularly enough, he had very sound geological views, and his philosophical mind suggested the obvious consideration that, as the known world occupied only one-third of the circumference of the globe, there might be in that space two or more habitable worlds, with the inhabitants of whom, being of a different race, the geographer had no concern. Seneca, in his famous passage in the *Medea*, must have caught up the echo of some such suggestion as this. He still believes the Caspian to communicate with the Northern Ocean. His knowledge of Britain was only that supplied by Julius Cæsar : he mentions Ierne, but totally discredits Thule, and other islands round Britain. From some of his descriptions it is clear that he wrote with a map before him, and with regard to Vesuvius he makes the sagacious observation, that it had the appearance of having once been a volcano ; he did not suspect how very soon afterwards it would re-establish its credit. As to his knowledge of nearer India, it had not progressed beyond that possessed by Eratosthenes. Of further India and the Indian Archipelago he had heard absolutely nothing, and his allusion to the Seres is such as clearly shows that he believed them to be an Indian tribe. Notwithstanding the great increase of the trade to India, which he admits, he knew nothing of the Indian Ocean, on either the African or the Arabian side. The Southern Horn, or Cape Guardafui, was still the limit of the known world, and of the outer coast of *Araia* he knew nothing. He adds nothing to our knowledge of Africa which, excluding Egypt, he still calls Lybia, the term Africa being restricted to the Province of Carthage, and used only by the Latin authors.

In the half century which intervened betwixt Strabo, the great Greek geographer, and Pliny the elder, the great Latin describer of Nature, which period includes the reign of the Roman Emperors from Augustus to Vespasian, the Empire had been enlarged.

Claudius had invaded in person, and conquered Britain : Tacitus mentions Londinium as an emporium of trade, but still the legions had at first objected to embark on an enterprize which would lead them beyond the limits of the known world. To the south a Roman General had forced his way over the ranges of Mount Atlas in Africa. In this period Hippalus, a Greek mariner, who had observed the regularity of the monsoons, was bold enough to make use of them, and steer a direct course to India from the coast of Arabia. This practice became completely established before the time of Pliny, and the anonymous author of the *Periplus* of the Erythrean Sea. Pomponius Mela, a Spaniard, almost the only *extant* Latin Geographer, lived in this period : his work is very compendious, but is quoted by Pliny, which indicates that it was valued in his day. We find in him a new and remarkable conception. Starting upon the basis, that the habitable world was surrounded by the ocean, he lays down as a fact the existence of another habitable world, or *antichthon*, in the southern temperate zone, but unknown and inaccessible, and strange to say, he seemed to indicate Taprobane, or Ceylon, as part of this new continent. He is singularly deficient in critical judgment, as he quotes all the idle stories of early geographers, which had long been abandoned by more sober authors.

Pliny, the elder, was an Italian, a friend of Vespasian and Titus ; he was in command of the fleet at Misenum A. D. 79, when the eruption of Vesuvius took place, and he lost his life in his anxiety to examine too closely the surprising phenomena. He had all his life been accumulating vast materials for his *History of Nature*, and at a comparatively advanced age, after writing several other books, he devoted himself to this great work, which has survived to our time. It is a vast compilation, but devoid of critical judgment, or philosophical arrangement. There is a total absence of a scientific comprehension of the great subject. The Latin mind was essentially inferior to the Greek in this particular. Pliny gives dry catalogues of the names of cities and physical features : the subject, which had almost risen to the rank of a romance in the skilful treatment of the Greek, shrunk into the narrow, though perhaps more correct, shape of a dictionary in the hands of the Romans. He clearly had a map before him, and follows the outline, and makes no attempt to assign latitudes or longitudes. Still the extent of information supplied by him far exceeds that of his predecessors. The system of Roman administration had furnished statistical details. He knew better than to suppose that a branch of the Ister could flow into the Adriatic, but he still upholds the old fable of the Rhipean Mountains and the Hyperboreans, north of the Palus Mæotis

28 *The Geography of the Greeks and Romans.*

The fleet of Augustus had penetrated beyond the Cimbrian promontory, or Jutland, into the Baltic, but his knowledge ceased there, and he was so entirely devoid of critical judgment that he quotes the names of tribes mentioned centuries before by Herodotus, and long before totally ignored by the more cautious Grecian geographers. He had a dim vision of a great island to the north, of unknown extent, and said to form another quarter of the world, called Scandinavia, and this is the first mention of that great name. We read in his pages for the first time of Albion and Hibernia, the Silures and the islands of the Orcades, the Hæbrides, Mona and Vectis, unquestionably the Isle of Wight. Strange to say, though he had filled the office of Procurator of Spain, he still connects the Cassiterides, abounding with tin, with that country, and not with England. Palmyra had risen to importance in his time. Judæa had been conquered: the mystery of the Caucasus range had been solved, for he mentions the pass of Dariel, the Caucasian gates; he still adhered to the error that the Caspian Sea was an inlet of the great Northern Ocean, though he had found out about the route taken by the overland trade from India to the Caspian. His knowledge of India had certainly advanced, and he mentions the chief confluent of the river Ganges, and we can recognize the Jamna, the Keyn, the Chambal, the Kosi, and the Son, or Hiranyabahu, which are mentioned as two separate streams. We hear from him of the new, but established, sea route across the Indian Ocean from Cape Fartak on the coast of Arabia to the coast of India, which he gives with correctness, as it is confirmed by the Periplus of the Erythraean Sea, which will be noticed further on. The knowledge of Taprobane, or Ceylon, had been remarkably increased by the circumstance of a ship having been carried away, in the reign of the Emperor Claudius, from the coast of Arabia by north winds, and driven to a port in the Island of Ceylon, where the king showed hospitality to the strangers, and sent four envoys in return to Rome, from whom Pliny professes to have obtained his knowledge, which, however, is both erroneous and unintelligible. Perhaps his means of oral interchange of ideas with the Sinhalese envoy was as imperfect as that of geographers of the present age with the envoys of king Mtesa of Uganda from Victoria Nyauza. In Africa he mentions Adulis in Æthiopia, famous for its inscription, subsequently copied by Cosmas Indicopleustes; it was situated outside the limits of the Roman Empire at the time of its widest extent, and was rising in importance since the time of Strabo, who does not mention it. He had made no progress in the knowledge of the interior of Africa, and clung to the idea of the Southern Ocean being at a moderate distance from Meroc. This baseless

theory compelled him to accept the still more strange notion of Juba, whom he quotes, that the stream of the River Niger, of which he had unquestionably obtained correct information, was the upper course of the River Nile, which flowed eastward. He records the fact of the discovery of the Fortunate Islands, the Roman expedition across the Atlas, the exploration of Ethiopia, and the upper course of the River Nile, and the campaign against the Garamantes. His final conclusion is startling, that Europe is nearly as big again as Asia and more than twice as large as Africa. It has already been remarked, that he never alludes to the existence of Strabo's great work, which was completed before he was born.

Very nearly contemporary with Pliny was the anonymous treatise known as the *Periplus of the Erythraean Sea*, which is a manual for the instruction of navigators in that sea, in the widest sense of the word—not only the Red Sea, but the coasts of Africa outside the Straits of Babelmandeb, as far as they were known, the coasts of Arabia and India, down to the extremity of the Malabar Coast, with a few notices of the more distant parts of India and one of China. It is obvious that the writer was a Greek merchant of Alexandria in Egypt, and his statements, intended solely for purposes of business, are among the most satisfactory and trustworthy that have come down to us. His knowledge of the east African Coast had extended twelve hundred geographical miles, and reached as far as the Island of Zanzibar. Beyond that nothing was known, but it was presumed that the coast trended away to the west, in obedience to the theory which had fixed itself in the minds of men, that Africa was circumnavigable; but it was a great advance to get south of the Equator. Of the trading ports on both sides of the Red Sea he had good accounts, but of the Persian Gulf he was ignorant. He traces the south Coast of Arabia, and, crossing the mouth of the Persian Gulf, he proceeds eastward, till he comes to a country which he calls Scythia, and the mouths of the River Indus. This mention of Scythia is a singular confirmation of the fact, established by other proofs, of the Greek dominion in Bactria having been overrun by Scythians, who had worked their way down the Valley of the Indus. He then proceeds southward to Barygaza, the great emporium of Western India, the modern *Blroch*.

He mentions that Greek drachmas of the kings of Bactria were still current in the market, which is a singular confirmation of facts otherwise discovered: in modern times hundreds of large gold coins, as fresh as if just from the mint, with the image of Nero, have been found lower down, near Cannanore, and coins of Julius, Augustus and Tiberius Cæsar have been found much further

30 *The Geography of the Greeks and Romans.*

inland. This indicates a commerce in existence at the time of the *Periplus*. Imperfect as is the allusion to India, it is interesting to find the country now known as the Dakkan called *Dachinabades*, which is very nearly the correct name in Sanskrit. When the author describes the west coast of India, he mentions a place called *Comar*, or *Comari*, which we unhesitatingly recognise as *Cape Comorin*, the southern promontory of India. Now the derivation of this word is unquestionably *Kumari*, the Virgin, from a temple dedicated to the Goddess *Durga*: thus we have an important epoch fixed, that at a period anterior to the date of the *Periplus*, and long enough to fix a notorious name on a headland, the Arian race had penetrated to the most southern point of India, carrying with them Brahminical religion and Sanskrit language. The author of the *Periplus* undertakes to trace the coast onward to the river *Ganges*, and, though he alludes to pearls, pepper, and tortoise shell, and *Taprobane* with the name of *Palæsimundus*, yet clearly he writes no longer from proper knowledge, but mere hearsay. Here we see the first glimmering of the idea of a country more eastern than the *Ganges*, described as the *Island of Chryse*, which later on developed itself into the *Golden Chersonese* of *Ptolemy*, identified with the peninsula of *Indo-China* or *Further India*: he alludes to the export of muslin fabrics.

We hear dimly of a country called *Thina*, lying up to the north, where the sea coast ends, from which was exported silk, both raw and spun, and woven: these were carried overland through *Bactria*, and down the *Ganges* to the west-coast of India. Here we can trace the two different routes, by which exports were made from China to India, for we have reached the real China at last. As stated above, it looks very much as if the term *Seres* was connected with *Serendip*, or *Ceylon*. In both the above routes the exports from China to India were by land, and no idea of a sea-route is indicated: one of these land routes from China to *Bactria* would be the well known route over the *Pamir*, the other *viâ* *Tibet*, over the ranges of the *Himâlaya* into the basin of the *Ganges*, which still exists, though obstructed by the policy of Tibetan exclusiveness. The author evidently is in a mist as to the exact position of China, but to our present knowledge his statements are quite reconcilable. We have to thank him for a thoroughly honest, and most remarkable book.

Dionysius Periegetes has left a poem in 1200 Hexameter lines, giving a succinct account of the world and all the particulars which a man of education, not a traveller, should know: This poem represents the knowledge of the cultivated class at a period which from intrinsic evidence is fixed at the reign of *Domitian*. He evidently

was deficient in the historic sense, for he places the same value upon the conquests in the east of Bacchus, as of Alexander. He attaches importance to the Indian promontory, as the extreme eastern limit of the world, and tells us that Bacchus put up columns, where Ganges pours its white waters to the Nysean shore, just as Hercules put up columns at the extreme limit of the west. He alludes to the Seres, as a Scythian tribe, evidently confusing the transmitter of the silk with the original unknown producer. He still gave credence to the notion that the Caspian Sea was but a gulf of the Northern Ocean. He mentions the Aláni, who were on their march westwards to work the downfall of Rome, and in this poem we hear for the first time the terrible name of the Hun, on the east side of the Caspian. He notices Chryse, the golden isle at the rising of the sun, and Taprobane, the Mother of Elephants. During the decline of the Roman Empire this little Greek poem became very popular, was twice translated into Latin verse, paraphrased, commented upon by Eustathius, who commented upon Homer in the twelfth century of our era. When letters were revived in Europe, it was used as a manual, and was actually studied at Oxford down to a recent period. And yet the idea presented of the world by the poet is as hazy as that which could be extracted from a London lady, or a Dorsetshire clown, at the present day, and the map of the world formed upon the data supplied by the text, when it is remembered that this must have been the prevailing notion from the time of Vespasian to the time of Vasco di Gama, is lamentable to look upon.

Tacitus, the historian, was son-in-law of Agricola, who circumnavigated Scotland and proved that Britain was an island. In his life of Agricola, and his Germania, he fills in details of the geographical picture, without adding to the breadth of knowledge. He had heard of vast islands in the northern sea, among which he locates the Sniones, or Swedes. Beyond them was a sluggish sea, and the light of the setting sun was prolonged till it mingled with that of sunrise. No doubt his contemporaries believed the former, and doubted the latter of these phenomena.

The Emperor Trajan extended the limits of the Empire beyond the Danube, and left upon the Iron Gates his inscription to record this fact, and the language of Roumania remains as nearly the only record of the Roman Colony: the bridge on the Danube has been swept away. In Trajan's time, about 107 A.D., according to Dio Cassius, an embassy from India came to Rome. His conquests in Mesopotamia enlarged the geographical knowledge of that country and Armenia. His successor, Hadrian, spent many years in a grand tour over his dominions. One little work of that period has survived, being the *Periplus* of the Euxine

32 *The Geography of the Greeks and Romans.*

sea by Arrian, who was himself Governor of Cappadocia and Pontus, which has the united merit of an official report and a geographical treatise, written by a competent man from his own proper knowledge.

He mentions having a full view of Mount Caucasus from his ship, and some audacious antiquarian pointed out to him the rock to which Prometheus was attached. We in our travels have often listened to indications, equally mendacious, though made in good faith by an over credulous narrator.

In the long peaceful reigns of the Antonines, no doubt, commercial intercourse extended, of which we have two evidences. Aurelian Victor alludes to an embassy from the Indians and Bactrians, and the *Annals of the Chinese Empire* have revealed the fact that in A.D. 166 an Ambassador from Antun, king of Tathsin, the name by which the Roman empire had long been known to the Chinese, reached the Court of the Chinese Emperor.

During this period lived, and wrote, a geographer of eminence who has been hardly dealt with by time, and whom we know only by quotations: his name was Marinus, and he was native of Tyre. He had profited by the long peace of the Roman Empire and the wide spread of knowledge, and his advance beyond the level of the geography of Pliny is very considerable. The great geographer Ptolemy lived at nearly the same period, and must have been largely indebted to his predecessor, but we cannot specify the extent of the debt. He was a man of great diligence and sound critical acumen. He mentions that a Roman expedition succeeded in crossing the Sahara and reached the Sudan, or Negro land, but the exact point is uncertain. He had received remarkable information of the caravan route over the Pamir to the silk-producing countries; he had realized the existence of a Further India, or the Golden Chersonese, and a considerable eastern extension beyond that: he had also ascertained that the Eastern Coast of Africa extended south of the Equator and that apparently the coast line beyond that had no limit: to the north he admitted the existence of Thule, and the fact of its being within the Arctic zone. All these considerations forced upon him the necessity of giving the habitable world a length and a breadth far exceeding the moderate views of Eratosthenes; but the undoubted truth of the facts that urged him to this conclusion, was so shrouded by the exaggerations and inaccuracies of his calculations of the latitude and longitude that he fell into stupendous errors, which were only partly corrected by his successor, Ptolemy, and which were destined, centuries later, to have such a deep influence on the extension of geographical

knowledge to the west. Ptolemy nobly admits that he made the work of his predecessor the basis of his own; had he not done so, no one would have heard of the great learning and intelligence of Marinus of Tyre.

With Claudius Ptolemy, a native of Egypt, who lived at Alexandria in the middle of the second century of the Christian era, the geographical knowledge of the Antients reached its highest level. It is difficult to say whether he was more renowned as a geographer or as an astronomer. He undertook to reform the map of the world, and not, like Strabo, to give a physical description of the world; he wished to construct that map on sound scientific or astronomical principles. Unfortunately the number of astronomical observations was too small for the purpose, and he had to supplement the deficiency by calculations based upon itineraries: he fell into the snare of clothing the result of such unscientific material in a scientific form, giving the latitude and longitude of every place, though they had not been determined by observations, and this fact must be borne in mind, when too much stress is laid upon the authority of his maps. A modern geographer takes care to indicate the process by which he arrives at conclusions, whether by scientific observations, or mere calculations. Ptolemy did not take this precaution: his scientific garb is merely a specious disguise of arbitrary conclusions drawn from uncertain data. Six books out of the eight consist entirely of tables of latitudes and longitudes of places for the purpose of enabling any reader to construct a map. His work assumed the form, but the form only, of tables of scientific observations. The measurement of longitude by time was beyond the power of his contemporaries. His method of preparing his maps was, however, far in advance of his predecessors.

When we consider the extent of geographical knowledge evidenced in his work, we have to recollect the long peaceful years of administration of the Roman Provinces which had passed since the time of Pliny the elder, some particulars of which have been already alluded to. His conceptions with regard to Europe were in the main correct, though deformed by strange and inexplicable blunders: he falls into error with regard to the great rivers flowing into the Euxine, though he is the first correctly to indicate the Volga. He cleaves to the old error with regard to the Rhipæan mountains, but he knew that the Caspian was an inland sea, thus shaking off the error of centuries. The Jaxartes, according to him, flowed into the Caspian, as well as the Oxus. He had clearer views of the vast extent of Scythia, or Russia in Asia, and some dim idea of the land of the Scres, the emporium of the silk trade, beyond Scythia, and south of the Scres was the land of the Sincæ or Thinaæ, the

34 *The Geography of the Greeks and Romans.*

capital of which was Cattigara, and mariners had attained this country by a sea route. He strangely misconceived the shape of the peninsula of India, and the size of Ceylon. Beyond the Golden Chersonese he, by a strange error, makes the coast trend to the south, and prolongs it indefinitely, as the southern boundary of the Indian Ocean, till it joins the Continent of Africa, south of the Equator. The Indian Ocean thus becomes an internal sea, like the Mediterranean, but with no outlet. It is clear that some account had reached him of the long Peninsula of Malacca, and the still longer chain of islands of the Indian Archipelago, trending to the south and believed to be continuous land, and fancy had supplied the rest, as a further expansion of the idea of an Antichthon started by Pomponius Mela.

With regard to Africa a value has been assigned to the statements of Ptolemy far beyond their real deserts. Starting from Egypt, he traces the Nile back to the island, or rather peninsula, of Meroe, formed by the junction of two rivers. Beyond that navigation was impeded then, as now, by the vegetation. But Ptolemy had heard from traders, probably by way of Abyssinia, of a lake, from which the Blue Nile had its source, though he still deemed the White Nile to be the main stream. From Rhapta on the east coast of Africa, near Zanzibar, he had picked up information of two equatorial lakes, giving birth to two branches of the headwaters of the Nile, and had depicted it in his map. In these last days two such lakes have been discovered, and the Nile may be said to have its source in one, and pass through the other. He had also heard of a range of mountains so lofty that they were covered with snow, which he called the Mountains of the Moon. In these last days two snow covered mountains to the east of the Nile basin have been discovered. As regards both lakes and mountains, there has been a wonderful confirmation of the truth of the reports collected by the geographer, but in neither case had they been correctly entered on the map, nor any pretence made of a scientific delineation. Ptolemy assumed incorrectly that the lakes were fed by the snow of the mountains, and correctly that the river was fed by the lakes. In neither case had he any accurate means of information.

So also he names the Gir and the Nigir as rivers of the interior, but his statement is far from clear. A false etymology has given rise to the idea that the river of Timbuktoo, known as the Joliba, and Quarra, must necessarily be the so-called Niger, or Black River, because the inhabitants are black. The name has now become inseparably connected with that river, but it is doubtful whether the Gir and Nigir of Ptolemy were

not quite distinct from the river of Timbuktoo, and north of the Sahara. Any argument based upon the latitudes and longitudes assigned by Ptolemy falls to the ground after a consideration of the method adopted by him of assigning them to places of which he had absolutely no scientific information. He appears not to have been aware of the existence of the Sahara betwixt Gætulia and the Sudan. His information with regard to the west coast of Africa is equally unsatisfactory, and cannot be reconciled with existing geographical features. We are left in total uncertainty.

On the whole, Ptolemy's high character as an astronomer, and the speciously scientific mode of marshalling his facts, has led many, up to a late date, to place a much higher value on his statements than can be warranted by the imperfection of his materials. The plan which he had proposed to himself, was a noble one, but it was one which could be realized only in days like our own, when there is an abundance of opportunity of correcting estimates of distance by actual observations. It is a singular fact, that the exaggerated prolongation which he made of the continent of Asia towards the east, had necessarily the effect of greatly reducing the interval of unknown space lying between Eastern Asia and Western Europe; and this error was the parent of Columbus' enterprise to find his way westward to India, and led to the discovery of America.

If Ptolemy's treatise superseded all previous works, it had also no successor. The age of Roman literature, Greek or Latin, was passing away, and there is little further of the nature of discovery to record. At this period Clement of Alexander wrote about the Gymnosophists, and alludes to Buddha by name, thus implying an intimate knowledge of the religion of India. Dio Cassius, a contemporary author, records the invasion of Britain by the Emperor Septimus Severus. On the eastern frontier the Parthian gave way to the Persian dynasty, leading to renewed hostilities, and the shortlived splendour of Palmyra succeeded. In the time of the Emperor Julian we hear of another Embassy from the Divi and Serendivi, probably the Maldives and Ceylon.

The writers whose works have survived to us, are not of great geographical importance, they are Pausanias, whose object was archæological; Marcianus, who wrote the *Periplus* of the outer sea, and an anonymous fragment of the *Stadiasmus* of the Inner Sea, which is an original and valuable work. To these must be added the great *Geographical Dictionary* of Stephanus of Byzantium compiled about the sixth century, of which only an epitome has survived. Among the Roman writers we may notice

36 *The Geography of the Greeks and Romans.*

Philostratus, author of the life of Apollonius of Tyana, whose date is fixed after the death of the Empress Julia Domina : whatever truth there may be in his romance of the visit of his hero to India, still we have the fact of a certain degree of knowledge, however vague, of India, which has to be taken into account. Solinus flourished in the third century, and first makes use of the term "Mediterranean" for the inner sea : Ammianus Marcellinus, who chronicles the campaigns of Julia, alludes to the Huns and Saraceni, or men of the East. In the fifth century lived Orosius, whose work had the honour of being translated into Anglo-Saxon by King Alfred. The famous itineraries of Antonine and others are contributions to geography. Last on our list comes Cosmos Indicopleustes, a merchant, who had travelled over a great part of the world, and wrote his *Topographia Christiania* about (535 A. D.). He had all manner of queer notions, one of which was that the world was not a sphere, but a solid plane. He first mentioned the Sinaitic inscriptions, and copied the inscription of Adulis in Abyssinia, which has since perished. He speaks with distinctness of China, at the end of the world, but still visited by merchants. He still considered the Caspian as a Gulf of the Northern Sea.

It may fairly be assumed from the histories of all nations that, when any country is described as excelling in marvellous beauty, or wealth, or surrounded with strange horror and awful physical phenomena, *it is unknown*. All the tracts visited are found to resemble each other very much in general features, and to be habitable by man ; and the human race is found to have the same structural conformation. In a period when the progress of knowledge is arrested, we find phenomena like load-stone rocks and men with heads under their shoulders in tracts which were fully described previously. India fell back into darkness after the time of Alexander, just as Kashgaria has fallen back since its re-conquest by the Chinese. On the other hand, the extreme Orient and Oceania with all their wonders have come into the clear light of day. We have had to give up with a sigh the Garden of Eden, and the cradle of the human race, as we can find no place for it. We know clearly what the author of the Acts of the Apostles meant by the Oikoumene, or habitable world of his time. We can appraise at their just value the boasts of Horace and Virgil, and other writers of the Augustan age, with regard to the Seres, the Garamantes, the Indi, the Scythes, and the dwellers on the Danube and the Euphrates. The Greeks threw the fascination of their genius round the tamest subjects. Homer's wanderings of Ulysses, Plato's Atlantis, Herodotus' wonderful stories, travellers' tales,

told from mouth to mouth, and bold, but quite unsupported, theories of great astronomers, choked the steady progress of knowledge, which can only be maintained by heaping facts upon facts. The Romans, like ourselves, were a more prosaic and matter of fact people: they drew up itineraries and provincial maps for the use of the general and the administrator. So in India all the romance has died out before the inexorable requirements of the Collector of Revenue, and the Police officer. Great cities which our forefathers spoke of with respect and half-knowledge, live only in our memories as halting places of our soldiers, or head-quarters of our administrative districts.

It is depressing to think that we have no new world to conquer in the old heroic fashion. We should indeed like to see a new Alexander conduct an army to Lassa, break up the Tibetan exclusiveness, and come out in the Provinces of Kansuh, and Szchuen of north China. Central Africa, Borneo, and Papua, have still to be traversed: the outline is drawn, but the details of the picture have to be filled up. We have no new Meridian line to draw like Eratosthenes, no new theory of a Great Circle with three hundred and sixty degrees to propound, like Hipparchus. We have no news to bring home like Pytheas and Hanno, which, after being disbelieved for centuries, will prove true, and no visions of countries beyond the Atlantic, the limit of the world, like Eratosthenes and Seneca. We sympathise with those early geographers, those great hearts, and wonderful intelligences with such limited means of locomotion and observation. How they must have yearned to know who the nations were that were hidden from their sight? Who inhabited the southern Tropics and beyond, from whom no message had ever come? What were the Antipodes, and the Antichthon? For they knew from the conformation of the sphere, that there must be a pace.

ROBERT CUST.

ART. II.—EURASIANS AND POOR EUROPEANS IN INDIA.

“**T**HERE is a numerous class of subjects called half-castes “ who require particular attention. They are excluded “ from the military and civil service, although many of them are “ men of talent and education. It may gratify pride to consider “ their energies inferior to those of their fathers, because there “ is a shade of difference in their colour ; but man is everywhere “ essentially the same, and national superiority seems to be produced by artificial causes. Now they profess the same creed “ as we do, our law are theirs, their passions are warmed by “ the same education, and their souls expanded by similar references to those landmarks of antiquity that urged their sires “ to aim at immortality ; but they are sunk in their own estimation, by seeing the road to ambition shut against them.”

(“ *Fifteen Years in India, or Sketches of a Soldier's Life, being an Attempt to describe Persons and Things in various Parts of Hindustan.* From the journal of an officer in Her Majesty's service. Longman, Hunt & Co., London, 1822.)

It is now nearly sixty years since the book in which these words occur was published, and it would not be impossible, or very difficult, were it needful, to set on record here the testimony of men well able to judge, in all services of the empire, to the high estimation in which many members of the Eurasian community have been held for all those qualities which mark the best types of men of pure European extraction and education who have served India. On the other hand, while testimony of this order is ungrudgingly tendered, there are high officials, men of long and varied Indian experience, such as Sir Ashley Eden and Sir Alexander Arbuthnot who, while holding in very high estimation the good qualities manifested by Eurasians and the solid and valuable work performed by many individuals, are yet impelled to declare, that “ the great defect in the character of men brought up in India,” as it has presented itself to them, “ is the want of self-reliance, self-dependence, a certain hardness of character that I may call backbone ” (Sir Ashley Eden's Address, St. Xavier's College, December 1878) ; and Sir Alexander Arbuthnot no less decisively says that the defects of the Anglo-Indian character may be classed under two heads ; first, a want of self-dependence and trust in themselves, and secondly, a seemingly constitutional aversion to manual labour.

That has happened in India which has occurred in most lands and in all times, wherever and whenever two races at different stages of civilization have met. The races have mingled, and an amalgam has been produced possessing qualities akin to both. The question—and it is a most momentous one to men of English descent in India, and one that is only as yet in process of solution—is what part men of European extraction, born in India, and more or less completely educated there, shall take in the industrial and commercial development of India's future, and in the civil, military, medical, and other great State departments of the empire. That they are weighted with many and grave retarding conditions in the struggle for a higher and a brighter future for their sons—conditions inherited, acquired, and, it may be, imposed—no one who knows Eurasians will, we should think, be prepared to deny; and it is the influence these conditions may exercise in hindering Eurasians from acquiring for themselves and transmitting to succeeding generations a lot in life less hampered with difficulties, a character more stable and tenacious of purpose, and a determination to be, to do and dare, all that men may which, it seems to us, all who have the interests of India at heart, and who labour for the well-being of Eurasians and poor Europeans, much more the community who suffer under them in the race of life, should employ every means in the training and education of the rising race to eradicate or minimise.

Portuguese, Dutch, French, and English adventurers and settlers left behind them a race of men, which,—because of the less desirable qualities inherited from their mothers, their uninterrupted contact and intercourse with natives, low class natives in many cases, as servants, during that period of life when the future character is formed and crystallized, and the want of that healthy rivalry and fellowship with the hardy race of their fathers, which their isolated position entailed,—grew up and transmitted to their children qualities which weighted them in no ordinary fashion in their struggle to acquire a living and keep their footing with the harder native races of India, and the descendants of their fathers' race. The lax morality in which many were cradled, the enervating effects of the climate of the country on races of European extraction, and other causes, such as the tendency, which has manifested itself more or less markedly wherever a mixed race has been produced, for the pure race of the fathers to repudiate the equality of the mixed one, in many instances to treat its members with indignity or scant courtesy—all these causes, and such as these, tended still further to burden Eurasians, and hedge them round with a mass of retarding conditions in their life's progress, which in the case

40 *Eurasians and Poor Europeans in India.*

of many individuals, required an effort little short of heroic to overcome, and which in the case of many more will require a force little short of the marvellous to triumph over.

This is not the age, nor is this either the occasion or the place, to draw aside the curtain of India's past—a past that comes so very near our own day—and disclose in all its hideousness the depravity, the concubinage, and something worse that characterised the lives of not a few Europeans, during the existence of the Honorable East India Company. In the year 1814, when the writer whose words we have already quoted, visited Calcutta, this was the condition of society. “The state of concubinage in which so many native females live corrupts all morality and decency. Nearly every European private soldier has a family of half-castes; and there have been officers of rank and civilians in the country not contented without seraglios, like other Nabobs whom they learned to exceed in debauchery.” Thus arose the worst and the lowest section of the community, and its creative source is not altogether dried up to this day. The large majority of Eurasians, however, have intermarried with Europeans, and are gentlemen in manners, tastes, and education. They have characteristics of their own as every mixed race has; and it is in the development of what is desirable and the modification or erasure of the deterrent conditions they have inherited that their future lies.

Since the beginning of this century, the Eurasian community has advanced considerably in self-reliance, education, and social status. The picture we have of Eurasians, as the century opens, drawn by the hand of a warm-hearted English gentleman, is that of a large class of British subjects, with tastes, education, traditions and religion in close sympathy with Englishmen, and hearts pulsating with a loyalty as devoted to English rule as those of natives of Britain themselves, who, nevertheless, were debarred from occupying many positions in the service of India, the very land of their birth, which their intimate knowledge of the native races and the vernaculars eminently qualified them to attain.

No doubt their birth and training tended in some measure to rob their character of some of those higher qualities which characterise the race of their fathers; and to foster in them some of those less desirable attributes which a lifelong contact with the lower class of natives is likely to produce in the descendants even of the most robust races; inordinate conceit, an excessive self-confidence, not always well grounded, love of finery and display, a disinclination to do for themselves even in the commonest details of every-day life the slightest service that dependants could be got to perform, and an aversion to engage in any pursuit, or take

up any calling, which was supposed beneath the dignity of gentlemen, and the descendants of a conquering race to follow. It should be borne in mind, however, that from the very earliest days of the East India Company down even to within thirty years of the date when the Empire of India passed from the hands of a company of traders to the Imperial rule of the Crown of England, no one—not even Englishmen—was allowed to settle in India, and follow even the most peaceful calling, without the special permission of the Court of Directors; and when, for any reason, an individual became obnoxious or troublesome, the permission was withdrawn and the offender deported. Even Alexander Duff, before he sailed from Britain in the year 1829, had to furnish himself with the Company's permission to settle in India, and permission for a lady to accompany him as his wife was refused until the veritable Mrs. Duff was produced. The Company's servants all over India formed an exclusive circle, and enjoyed a monopoly of office and emolument which no outsiders, *interlopers* they were called, could ever attain; and there will readily occur to our readers the names of families who for three generations have been represented in India by some of their members. When by family influence and other interest brought to bear on those who had the guidance of the Company's affairs, it was alone possible to obtain an entrance on an Indian career, it is not at all to be wondered at, either that the land swarmed with European adventurers ready to barter, to intrigue, or to fight for their own hand, or sell their services to the highest bidder as occasion offered, or that Eurasians, notwithstanding their parentage, or rather because of their parentage, which placed them under a social ban, should have failed to secure for their community a worthy position in any of the services.

There fell on the field of Seringapatam, with many other gallant men, a brave and gallant soldier, Ensign Ricketts of the Engineers, whose orphan boy found a home in the Upper Orphan School of Kidderpore. J. W. Ricketts, the ward of Kidderpore Orphan School, was one of the earliest and ablest members of the Eurasian community, who lived and laboured here in India for their well-being, and who advocated, and advocated successfully, the claims of Eurasians to be freed from civil and political disabilities and to have some share in the civil and military services of India. It was largely due to the agitation which he and others originated, and to the mission which he undertook in 1830 to plead their cause in England, that, in the year 1833, during the Governor-Generalship of Lord W. Bentinck, the Indian service was thrown open to all persons, whatever their birth or colour.

How little the rulers of India have found it needful to

42 *Eurasians and Poor Europeans in India.*

regard, either in spirit or letter, the great charter of Indian freedom and right, is apparent from the fact that it was only in the year 1853 that the Indian Civil Service was thrown open to competition ; and that now, in 1880, it is impossible out of England to obtain any appointment in any great Indian department except in its very lowest ranks, or under very exceptional circumstances without undergoing a residence and training in England, which practically closes the way to high office to all but the comparatively wealthy. Even in the lower grades of the departments there are fairly educated Eurasian lads, as fairly educated as the sons of the lower, middle ranks in England, who owe their education—small thanks to the Indian Legislature—to adventure schools and missionary colleges and individual philanthropy, and who are competing side by side with highly educated, State educated, Hindoos and Mahomedans. What chance can lads of European extraction, with the traditions and tastes and aspirations of their fathers, and for whom the State does so little either to educate them, or fit them in any way to serve India, have with the sons of native races whose habits of life and modes of living render it possible for them to live in comparative comfort on a sum which would inevitably starve to death even the mythical Scottish student, who is supposed to cultivate literature on a little oatmeal ? In this matter of education, Eurasian lads must compete with natives at a disadvantage, and the conditions of equality in the struggle will only be more equally distributed, when Eurasians avail themselves of the education provided in State-aided colleges or enjoy the same advantages in this respect as natives. The cost per head to India, for educating the sons of Natives, Hindoos and Mahomedans, many of them belonging to the higher classes and perfectly able to pay handsomely for their own education, ranges in the Presidency of Bengal from Rs. 193 in the Presidency College to Rs. 605 in the Berhampore College, while missionary and independent colleges, whose students rank as high in the examinations of the Calcutta University, are able to produce their results at a cost to the State of Rs. 18 in the General Assembly's College ; Rs. 63 in the Free Church College ; Rs. 86 in the now defunct Cathedral Mission ; Rs. 51 in St. Xavier's College ; Rs. 60 in the London Mission, and Rs. 176 in the Doveton College. Amongst all the educational institutions in existence in India the only distinctively Eurasian College is the Doveton. The kindred Madras Doveton College owes its existence to the same generous founder, and was organised by Morgan, the first and greatest of the Principals of the Doveton College, Calcutta.

The Doveton College, which has played a most important part in the educational and intellectual progress of the Eurasian com-

munity, owes its origin to the son of the English ensign who left his boy a ward of the Orphan School of Kidderpore; and its most liberal donor, whose name it bears, was a member of the same community, abandoned by his nearest relatives, and picked out of a charity school in Madras, and educated by his uncle to serve with distinction in the Nizam's dominions. The story of the Doveton and its vicissitudes, from the Saturday evening of 1st March 1823, when John William Ricketts gathered in his house in South Colinga Street a few members and friends of the community, and thus laid the foundation of what is now the Doveton College, was ably told 25 years ago in the pages of this *Review* (See Vol. XXIV, page 288), by Dr. George Smith, who succeeded Morgan in the Principalship, and has been rehearsed at greater length in the fiftieth report of that institution, by Mr. Henry Andrews, one of the men yet alive, who fifty years ago, laboured to secure for Eurasians a legal and political status, and a share in the various offices of State. From first to last, down even to the present day, the history of this Eurasian Institution, notwithstanding the Doveton and DeSouza bequests, has been the history of a struggle against chronic indebtedness, and against the indifference of the very community for whom it has done so much, and in whose hands lies so much of its future usefulness.

Whatever the Doveton may have effected in the past, when it stood almost alone in India, it owes largely to its own community. While Hindoo and Mahomedan Colleges were founded and endowed at State expense, Government, though again and again solicited, refused its aid, although there is scarcely a Governor-General, or Member of Council, or Chief-Justice, or Judge, from the days of Lord Hastings, that did not subscribe liberally to its funds. It was not till 1864, ten years after the passing of the "Educational Despatch" of 1854, that Government were induced to give a grant of Rs. 380 to promote the higher education of Doveton students. Six years afterwards this grant was withdrawn owing to unfavourable results at the University examinations.

In 1872, Rs. 250 was again granted, and, had it not been for the very favourable results attained by Doveton students at the last University examinations, in all probability, there would have been a withdrawal of the grant for the second time.

The position which, in the main, the Eurasian community has taken up, is this, that, as a Christian community whose traditions and feelings are wholly English, they have declined to have their sons educated along with those of the non-Christian natives of India.

In the effort to educate their children separately, they were totally unaided by State grants up, as we have said, to 1864,

4 / Eurasians and Poor Europeans in India.

while large sums of public money were and are lavishly expended in providing higher class education for the non-Christian subjects of India. Eurasians have laboured for more than half a century to provide a Christian high class education for their sons and daughters ; and more than once in the history of the effort, disaster, and defeat has confronted them. If the effort is ever to be crowned with success, it can only be by some wealthy member of the community bequeathing a sufficiently large endowment to make it possible to employ the best staff that money can procure. Until some such event as this occurs, the idea for the embodiment of which Eurasians have struggled so long, an educational establishment complete in all its parts from an infant school to the full curriculum of an English college, can, so far at least, as a thoroughly equipped college department is concerned, only be a dream fitfully realised. It appears to us, that, however desirable in some respects the full realization of this complete scheme may be, there are no valid reasons why the sons of Eurasians should not sit side by side with those of Hindoos and Mahomedans in the class-rooms of the Government colleges. By the time Eurasian lads are ready to enter on the study of the subjects implied in the curriculum of a college, the teachings of the family, the social circle, and their own educational establishments will have already done much to form the character and rendered it highly improbable, that either their faith or their morals will be injuriously affected by such an arrangement. It seems to us that there has been far too much made by ecclesiastics of the moral and religious difficulties of the educating together of Eurasians and natives, and by the very community who have no other choice than to trust their children from their very earliest years largely in the hands of native ayahs and bearers, drawn from the very lowest social and moral stratum of native society. Had their children from their birth been tended by Christian, English-speaking servants, drawn from the lower ranks of their own community, free from the grosser vices of lower class natives, then it might have been intelligible that to consort with low class Hindoo and Mahomedan lads in school work and school sports would have been a process to which few parents would have cared to subject their children. We are bound to say that many Eurasian lads are in possession of an amount of vernacular abuse and nastiness acquired from native servants which it would be difficult, if not impossible, for them to acquire either in the upper classes of a well regulated school, or still less in the class-rooms of an efficient college, even though educated side by side with lads of purely native birth.

India is the home, the native land, of Eurasians in as true a sense as it is of men of pure Indian blood. It is to India, and in India that Eurasians have to look for a career; and India is the only future of their children. In this struggle for existence they have as competitors and fellow-subjects purely native races, who, whatever defects of character they may labour under are many of them indued with a tenacity of purpose, and a splendid power of endurance which some sections of the Eurasian community would do well to emulate, and which all sections of Eurasian society will do well not to underrate. The natives of India are largely availing themselves of the high class education provided for them in State-aided schools and colleges, and are now crowding the subordinate grades of departments, and occupying some of the higher, which, even twenty years ago, were filled by men of European extraction or of purely English birth. It is clearly imperative that, if Eurasians are to compete with natives for posts in Government departments with any fair measure of success, they must be as well equipped as possible with a high class liberal education, to fit them for the contest; and those of their number who are not sufficiently wealthy to train and educate their lads in England, should avail themselves of the education offered in the Government high class schools and colleges. The supply of educated natives and Eurasians is yearly increasing, and however much, in past years, the Government of India may have been induced to impart to their dealings with Eurasians and natives occasional strokes of philanthropy, these will become rarer and more rare, as the debt of India accumulates, and the power of taxation approaches its limits, and the purely utilitarian principles that dominate the transactions of the bulk of States and men will impel the rulers of India to choose, on sound business principles, from amongst candidates equally fitted to serve the State in any capacity, those that can be had cheapest. It is here, it seems to us, that purely native races will have the advantage, because of their simpler and less expensive mode of living, unless Eurasians can claim and demonstrate the possession and exercise of such higher traits of character and capacity as will render their services to the State comparable in value with those of the highly paid English competition-wallah.

That the Eurasian community are alive in some degree to the grave crisis approaching in their position, is indicated by the Eurasian and Anglo-Indian Associations which have recently sprung up in the Bengal and Madras Presidencies, and by the establishment of the *Anglo-Indian Guardian*, a journal which

46 *Eurasians and Poor Europeans in India.*

has on several occasions, since its first publication two years ago, brought the weight of public opinion to bear on Indian officials, and agitated and discussed many topics of great interest to the community. The possession of an organ of their own to advocate and agitate the claims of their community, and the existence of an association with many branches which claims that it "practically represents the whole domiciled Anglo-Indian and Eurasian community," marks a stage in their history and a power of asserting themselves much in advance of the movement of 1829 under the guidance of J. W. Ricketts. The present movement, which bears with it so many high hopes, will be closely watched both in India and in England, and if the enthusiastic Madras meetings of a year ago, which preceded the formation of a Eurasian society with multifarious schemes for the advancement of the community, the Calcutta society and the various mofussil branches, end in wrangling and windy talk, there will sink below the social horizon of this generation at least, some of the highest hopes that have been formed by it of the power of Eurasians to organize their own community, and to do that for themselves in the direction of education, the provision of a future career for their children, and general self-helpfulness, which hitherto neither State nor charity has done, nor is imminently likely to do. The result of this movement is in their own hands, and its success or failure will be a test, of their own choosing, to mark their fitness or unfitness for taking a self-reliant independent part in the service of India and the development of its resources.

There is a law in life as clearly distinguishable in the history of races and nationalities, as in the life history of the animal and vegetable creations of the geologic past, and the infinite modifications and adaptations of form and colour and function of the present. It is this, that through the whole myriad linked web and woof of life, from its lowest microscopic form to its highest development, there is a never-ceasing struggle for existence, resulting in a survival of the fittest. Whole species and genera of plants and animals have again and again disappeared from the earth in the long pre-historic past, and given place, in succession, to others, with forms and functions suited to the new conditions. The Turanian races of primæval Europe were swept out before the advance of the early Aryans, and Teutons and Slavs followed in the wake of Celts, to renew the same struggle, a struggle continued to our own day, over wider areas of the earth's surface, and which will continue with more or less intensity of waxing or waning, producing fresh combination and results that may not be foretold, "till suns shall rise and set no more." Eurasians are the outcomes of one of these many struggles for

existence ; and no amount of sentiment, or poetry, or patriotism, or philanthropy, however much they may mitigate, can exempt them from the conditions to which all races of men, all life, is subject. If they can acquire and develope habits, capacities, and conditions of life, that will render it possible for them to co-exist with older and purer native races, or that will maintain the ascendancy of the race from whence they sprung, then their future is secure ; and it is a future weighted with responsibility and it may be with glory and renown. If not, they will as surely go under in the struggle of life as race after race has already disappeared, or is disappearing, before others with more enduring qualities. This may be, and is very sad, very lamentable ; and the question may well arise, whether there is no room in this world of ours, for anything but the play and rule of remorseless law. The answer to this seems to be, whether men will believe it or not, that the laws which dominate the moral and spiritual nature of man are as certain and resistless, though but faintly known and barely realized, as those which regulate and circumscribe what is material. Violation or disregard, deliberate or unconscious, of these laws, known or unknown, physical, moral or spiritual, brings its own consequences, proximate and remote, so remote that no human calculus may forecast the future hopeless lot, the misery and the woe, and the wretched death, that lie waiting, like avenging furies, men and races of man who in any way make for themselves, or have inherited, conditions and surroundings and consequences which render it inevitable, either that they should sink to the lowest level in the social scale, or die out of sheer inanition, or be slain by the vices that eat out their manhood and vitality.

It is in view of consequences such as these, consequences with which, here in India, the progeny of the earlier Dutch and Portuguese settlers are already face to face ; and which seem at no distant date likely to overtake the lower class of Eurasians and poor Europeans, that the law of human brotherhood, the law of Christian charity may and ought to find a wide and a fertile field of usefulness. The islands of the Pacific are strewn with the missionary evangelists of every Christian sect. Round the fringes of the "Dark" African Continent, Christian pioneers are working their way inland among hordes of savage men. In America and in Asia, the missionary follows the footsteps of the merchant. In all the wide world fabulous wealth is expended to evangelise and to Christianise ; is there to be no mission to the poor Eurasian, and the poor Indo-European ? Will the men of "The Oxford Mission" who are coming out here under the auspices of the "Right Reverend Father in God,"

48 *Eurasians and Poor Europeans in India.*

Bishop Johnson of Calcutta, with all the wealth of the rank and fashion of England at their back, lay aside for a little their classics and their mathematics, and their metaphysics, and the interesting legacy of dogmatic theology which has been inherited from the fathers of their Church, and gather together the "gutter children" of European extraction in Calcutta and elsewhere, and train them up in clean, self-reliant lives, and apprentice them to trades, that they may grow up with some hope of leading useful lives rather than develope into pests of society and a standing reproach to Indian statecraft and the Christian Church? The pietism that would hunger and thirst for the conversion of heathen lands, that would talk itself into a frenzy of enthusiasm over the evangelization of the higher class of Brahmins, that can build ornate cathedrals, and found churches, and spend splendid sums of money in printing Bibles, and raising rival preaching houses, within sound of the "jangle" of each other's bells, that can talk and meditate on the goodness and love, and infinite pity, of the "All Father," and the brotherhood of all men, and yet leave their own flesh and blood, the sons and daughters of their own fathers, to grow up in hunger, and ignorance, and vice, consorting with, and sinking to the level of, the veriest scum of Indian society, is not Christianity, as its great Founder taught it by both precept and example; is cant, contemptible cant, which will do more irreparable mischief to the cause of true Christ-like teaching in India and the world than all the accumulated wrong-doing and immorality that have been perpetrated in India since the rule of England first began.

Twenty years ago, Lord Canning placed it on record that, "If measures for educating these children are not promptly and vigorously encouraged and aided by the Government, we shall soon find ourselves embarrassed in all large towns and stations with a floating population of Indianized English loosely brought up, and exhibiting most of the worst qualities of both races, whilst the Eurasian population already so numerous that the means of education offered to it are quite inadequate, will increase more rapidly than ever. I can hardly imagine a more profitless, unmanageable community than one so composed. It might be long before it would grow to what would be called a class dangerous to the State, but very few years will make it, if neglected, a glaring reproach to the Government, and to the faith which it will, however ignorant and vicious, nominally profess. On the other hand, if cared for betimes it will become a source of strength and usefulness to British rule in India."

In the March of 1879, Lord Lytton, in a minute on the education and employment of natives and poor Europeans which will probably render his name one of the landmarks in their history, declared, that "Lord Canning's warning has unhappily been justified by the event. We were told officially, two years ago, that there were between eleven and twelve thousand European and Eurasian children in India growing up without any education at all—a scandal to the English name and the English Government."

Lord Canning's minute called into existence about a dozen schools, Hill schools, half the cost of which the State provided, and to which a grant-in-aid is still continued. The charges at these schools are necessarily so high, we are told, that the wealthy alone can take advantage of them. So that down to the present day neither State nor Church has touched even the fringe of what is a yearly increasing incubus, a peril to the State and a scandal to the Church; the minute of Lord Lytton has produced as yet nothing but a crop of suggestions, two reports and some wrangling.

The lengthy preliminary report of Archdeacon Baly appeared towards the close of last year; and amid a mass of details, neither new nor, in our opinion, necessary at so early a stage of the enquiry, the Archdeacon recommended the establishment of Hill schools and the subordination of the Training Colleges to the Episcopal Church in India. These in effect were the two proposals contained in the "Preliminary Report," which occupied about 59 pages of the *Gazette* of December 13th, 1879. It seems to us, that, however creditable these proposals may be, as evidencing the philanthropic desires of the Archdeacon and his loyalty to his own Church, they are both of them utterly impracticable, as solutions of the problem he has undertaken in some fashion to solve. We doubt if there be any body of sane legislators, either in or out of India, who would saddle the people of this country with the up-keep of a circle of Hill schools, in which would be gathered together the children of poor Eurasians and "Poor Whites" all over India. The idea is so completely Utopian, that the kindly feelings of the proposer must have obscured his more robust common sense; while the suggestion that the Training College for Indian teachers should be under the control of the clergy of the Church to which the Archdeacon belongs, will, in our estimation, rouse the religious animosity of every religious sect in India; and if persisted in, will embitter the whole question and sink it from one of imperial importance to the white heat of a profitless religious struggle. If it is imperative, as the advocates of Hill Boarding-schools maintain, that the children of European extraction in India should pass the adolescent period of their lives under the most favourable conditions which are

50 *Eurasians and Poor Europeans in India.*

likely to secure healthy bodies and vigorous minds, is not this a truism which will be universally admitted? Is not this as true of England and the world as it is of India? But when these advocates go on to argue that this in India should be effected at partly Government expense, because we are told the parents are too poor so to educate and train their children, then we say, that, if a scheme of this sort is launched and not strictly confined to the orphans and waifs of Indian society, the State will raise up a race of State paupers from whom all feelings of shame at receiving State alms will be eliminated, and who will marry and give in marriage, and produce children, to enter on much the same pauper life, and in turn look more to the State and less to their own exertions for the means of living. If the State wishes to pauperise the less wealthy Europeans and Eurasians, no better method could probably be employed than the scheme of Archdeacon Baly. A race of men, whether Europeans, Asiatics, or denizens of other parts of the earth's surface, who cannot suitably educate and provide for their children (beyond mere elementary education which the State may and ought to compel all its subjects to acquire), have no claim to pose as martyrs and benefactors to humanity, if, in view of their own and their descendant's future, they continue to bring children into the world to live a pauper's life or to suffer, to agonize and to die. A race nurtured under conditions, such as these would be a thorn in the body politic, and the moment State aid for their nurture was withdrawn, as inevitably it would be, they would sink into utter insignificance, or be trodden under foot in the social struggle, and annihilated by the men of a sturdier race. Men of European birth and extraction domiciled permanently in India are already beginning to feel bitterly some of the penalties incident to their lot. They at least can at the worst suffer and die, leaving no race behind them, with weaker bodies and less elastic minds, to grill and sweat and suffer beneath an Indian sun; and if puny creatures of the race have been already produced, who can only exist by periodic sojourns on breezy hill tops, then their expiring effort should be to enable them to effect this sojourn; and the philanthropic and the charitable may well aid them in their resolve. If the Government of India are themselves bringing out skilled artisans and others from England, to work on their railways and public works and elsewhere, and paying them such wretched sums, that they are unable to educate and provide for their children in a manner suitable to the needs of the climate of India, and are allowing mercantile houses, trading firms and others to perpetrate the same injustice, then the sooner this iniquity is exposed, and the cruel facts are made public, the better it will be for

England and for India. If it is the need of India that men of this sort should be brought to her shores to labour for the State, then the State should see to it, that they may return to the land of their birth and not remain here a disgrace to Englishmen and a cancer in her rule; or, if remaining, they should be a strength and bulwark, and not a race of sickly paupers. The Government seems to us to have committed a grave mistake in appointing the committee at all; and would have acted with greater wisdom had it handed the whole subject over to the educational department of the Presidency. The department has officers all over the Presidency, who, we are bound to say, would have supplied facts and suggestions from the yearly round of their duties and experience, certainly not less authentic than those supplied by Archdeacon Baly, and as certainly more varied and valuable, because coming from those the business of whose life it is to labour for the educational advancement of the people. No doubt, the Reverend Archdeacon Baly, in an enquiry of this sort, would prove a valuable witness, but it seems to us that it is to the educational department, the Government ought to look for a clear and succinct digest of the facts on which it is proposed to legislate, and for a practical working scheme for the attainment of the objects legislated for. It is no disparagement to the Archdeacon to say that there are in the educational departments of India gentlemen of not less wide culture, and quite as varied and lengthy Indian experience, whose acquaintance with the condition of European and Eurasian education and employment is much more real and varied than any thing to which Archdeacon Baly can aspire. His appointment to the position he holds on the committee is probably due to the fact that he has evinced his interest in the subject by the publication of a pamphlet distinguished by earnestness and thoughtfulness.

It seems to us that elementary schools for Eurasians and poor Europeans should be established,—ought long ago to have been established—under Government control and support in all the large Presidency towns and stations. It is in these towns and stations that Eurasians, wealthy and indigent alike, are gathered together in the largest numbers, and a local rate for educational purposes, if such a rate were deemed needful, would press with least hardship on the population of European extraction. If the Government are really bent on vigorous action in the matter, and will remit it to the educational departments of each Presidency, a very few years may see a network of efficient schools all over India affiliated with the already established higher class schools and colleges, with an undenominational Training College or its equivalent, in the capital of each Presidency, and a large proportion of children of school-going age in a fair way to wipe out some

52 Eurasians and Poor Europeans in India.

of the reproach which, as long as this remains undone, will lie on the rulers of India.

We have no faith whatever, that, were the Government to establish all over the country technical schools, such as that which now occupies the premises of Bishop's College at Secbore, these alone would train up a band of skilled tradesmen of European extraction which would render it unnecessary to import skilled European labour as largely as at present, or would in the end vindicate the wisdom of Government in incurring so large an expense for what after all is but an experiment with but a problematical outcome. Technical schools can never create an industry, however valuable they may be in diffusing sound knowledge. There is, it seems to us, room in each Presidency for a school of mining and metallurgy in connection with the Geological Survey; as well as for an Agricultural College, or at least a lectureship in the Principles of Agriculture in every Presidency college. Technical schools have their uses, highly important uses, especially in countries where the population has already mastered and developed a practical knowledge of handicrafts and a moderate degree of skill in these pursuits; but this is not the position which the Eurasian community occupies. It is only the merest fraction of the whole number who have followed, or whose parents have followed, engineering or mechanical pursuits. If it is contended that they have never had opportunities for doing so, and that it is the duty of the State to provide facilities for acquiring knowledge of this sort, then it appears to us that such a position is untenable, for it amounts to a declaration that the State ought to provide facilities for learning trades which neither the individual nor the community have found it to their advantage to follow. The supremacy of Britain in the mechanical arts and manufactures was not acquired in technical schools, and would probably never have been attained had it been sought for there. That supremacy and the skill acquired by other nationalities in kindred arts and professions, are due mainly to individual enterprise; and where a paternal government has thought proper to intervene, unless in the way of supplying skilled theoretical knowledge based on practice, and that but sparingly, the result has generally been disastrous. To set up technical schools all over India, is to begin at the wrong end, and to foster the growth of a class of men who, after the course of technical instruction had been ended, would look to the Government to supply them with fairly-paid posts in which the heaviest tools they would be required to use would be the pen, the pencil, and the compass.

A trade or handicraft is only to be learned effectually by the learner doing for himself, under the supervision of a skilled journeyman, every process implied in a correct practical knowledge

of the branch sought to be acquired. A more or less lengthy apprenticeship has proved itself in all time and in all countries the best school for rearing up a band of skilled, intelligent workmen ; and, until Eurasians show a much more marked tendency to undergo this, the best of all practical trainings, the less said about technical schools the better, as one of the panaceas for these ills.

The same objection, in our opinion, applies to the establishment of large hill farms under Government control. Agricultural colleges and lectureships are in our estimation imperatively needed in every large Presidency town in India, where the most advanced theory and practice of agriculturists all over the world would be taught and exhibited in field work to lads who have already taken part in, and mastered more or less the practical details of farm work, and who mean to follow it in the same practical fashion in after life. But it is a grave error to suppose that lads, Eurasian lads, who all their days have been sitting on school benches and cramming for College and University examinations, and who have shown no aptitude and no desire for the profession of agriculture by submitting to the only process by which its practical details can be learned, will condescend to twist the tail of a bullock, or handle a farm implement unless by proxy.

The question of Eurasian regiments has been discussed with more or less intermission since the mutiny and before it. On the one hand, it is maintained that a splendid body of men of European extraction could be secured to the country, and a new outlet for Eurasian youths attained, by the enrolling of distinctive Eurasian regiments, which would cost less to the State, and would largely undertake the duties which highly paid Europeans at present perform. On the other hand, it is held by officers and others who probably draw largely from their own experience of the very lowest class of Eurasians as bandsmen and drummers, that an experiment of this sort would be a very lively one for the officers commanding, and a doubtful one for the State. Indeed, so warm a friend to the community as Archdeacon Baly classes colonisation of lands out of India, or of the hill tracts of the peninsula, and Eurasian regiments, in the same category, as equally hopeless, (see *The Employment of Europeans in India*, page 26).

If there is a sufficiently large number of Eurasian lads in each Presidency, or in any one Presidency, who are ready to adopt soldiering as a profession, and who are prepared to submit themselves to all the hardships and subordinate routine duties implied in a soldier's life in India, then it seems to us it is only a question of training and discipline ; and the Government may safely enroll one regiment at least in each Presidency as a trial. In view of the practicability of Eurasian regiments it might not be inappropriate

54 Eurasians and Poor Europeans in India.

for the Government to utilise the Lawrence Asylum, and the Hill and other schools of a more or less eleemosynary character all over India, wherever Eurasian boys are educated, so that the training of a portion of them at least should have in view their entering the army.

The very lowest class of Eurasians who may, for various causes, be entering on a life of loaferism and vice, should be brought together in industrial schools, somewhat after the model of those in Britain, and taught trades, or, after a preliminary training be drafted into the Army, the Navy, the Merchant service, or wherever else they can serve India and make a living. At Madras, Bombay, and in the Hooghly, training-ships for Eurasian lads, such as those now to be found in almost all the large seaports of Great Britain and Ireland would rescue many from a life of vagabondage and, it may be, crime, and fit them for earning a living as able seamen.

The Eurasian community, it appears to us, while availing themselves of every legitimate channel to ventilate their grievances, to memorialize State departments, to petition Government, to interview statesmen and legislators with deputations, and to bring the weight of public opinion to bear on every hindrance which stands in the way of their advancement, should continually bear in mind, that their future lies largely in their own hands, and that they need not hope that either the high officials of India or England, or the Government of either, will do for their community what they will not do for themselves. It is not by scathing attacks on parties or Government, or by bitter and acrimonious comments on public men and public measures, or by virulent onslaughts on departments and functionaries,—however useful these attacks may be in certain stages of public mendacity, speculation, nepotism, and general wrong-doing—that any race or any community ever vindicated, or ever will vindicate, its own fitness for positions of trust and responsibility, where judicial calmness of judgment, moderation of speech, fertility of resource, and sterling integrity are eminently needful. It is in the daily exhibition of those higher qualities and characteristics which mark off a race fit to fight the battle of life manfully, and help to mould the future of a great people, that Eurasians will find the shortest method of solving the problem of their own future, and demonstrate their capacity to fill the highest offices in the Indian empire. Whenever and wherever these qualities manifest themselves, the rulers of India and the friends of the Indian people will not be slow to acknowledge them, to honour them, and to glory in them. Whether or not, these qualities will be developed and exhibited more largely in the future than they have been in the past, depends greatly on

Eurasians themselves, and not on any power lying outside their own will and resolve. The laws that govern existence in some of its aspects, are without pity and destitute of remorse; the fittest are the sole survivors, and the struggle of life goes on. It is chiefly in adversity, though not seldom in prosperity, that men and races show the sterling powers and capacities inherent in their natures; and if this crisis in their history, through which they are about to pass, and on which they have already entered, brings to the surface, in the Eurasian community, qualities which otherwise would have lain dormant, then, indeed, to them, "sweet are the uses of adversity." Throughout this long struggle for a higher, a more varied, and a more useful position in India, Eurasians have been followed by the anxious hopes, and the best wishes of some of the noblest Englishmen who have ever served India; and there are now in England and in India numerous sympathisers who will be the first to grieve if, by violence of speech, unreasonableness in their demands, overstatement of their claims, or deficiency in self-helpfulness, they should injure, or cast to the ground the promising hopes cherished of their future. As we have already noted, the conditions inherited, acquired, and it may be imposed, which act as hindrances in their efforts towards a brighter future, are such as require, in many instances, no ordinary effort to overcome. Every inch on their road to success must be gained for themselves and by themselves, amidst healthy rivalry, the play of interests, and the force of character. In the view of such a contest big with their future fate, through which, as through the valley of the shadow of racial and social death, their way lies to a higher and a nobler life, the hearts of those in whose veins flow their fathers' blood may well pulse with the excitement born of high hope and manly warfare; and there may well linger in the ears, and quicken the impulse, of all fighting this fight of social life or death, imperial usefulness or uselessness, some such words as these :—

"Courage, brother, do not stumble,
"Though thy path be dark as night,
"There's a star to guide the humble,
"Trust in God and do the right.
"Let the road be long and dreary,
"And its ending out of sight,
"Foot it bravely, strong or weary,
"Trust in God and do the right.
"Trust no party, Church or faction,
"Trust no leader in the fight,
"But in every word and action
"Trust in God and do the right."

THOMAS EDWARDS.

Postscript.—Since the foregoing article has been in type an official paper from the Government of Bengal to that of India has been published, in which Sir Ashley Eden effectively reviews the schemes of Archdeacon Baly and the proposals of the Government of India. The substance of his Lordship's conclusions are, that so far as Bengal is concerned, no additional school accommodation either on the Hills or plains is needful, except in the case of the Calcutta Free School, the Murgihatta Boy's School and the Entally Loretto Girl's School. The already existing Hill schools have accommodation for nearly double the number at present in attendance; and the fees and charges are considerably less than schools of a similar kind on the plains. In the case of the charity schools above mentioned, the Governor of Bengal is prepared to double the already existing grant on condition that accommodation can be provided for double the number at present in attendance from private sources; the increase space to be largely or entirely set apart for poor children from the Mufassil who have no opportunity of obtaining education nearer home. Sir Ashley Eden believes that teachers can be effectually trained by undergoing an apprenticeship with masters of schools; and that after passing the Entrance Examination of the Calcutta University those candidates selected could be placed under the Headmasters of higher class schools for two years, at the end of which time an examining board would grant certificates; and the Inspector of the Division certify to their fitness for teaching. This proposal for training teachers, if worked efficiently, we believe would produce a race of teachers at little cost to the State, who would be thoroughly up to their work in all its details; and in every respect be as efficient as those turned out by the most expensive State-aided Training College. The theory of teaching may be learned from books and lectures; but its practice can be attained only by daily contact with pupils, and by taking part in the work of a school under the direction and supervision of a skilled teacher. Some doubts have been thrown on the accuracy of Archdeacon Baly's figures; and the statement made to Lord Lytton about a year ago, regarding the large number of children of European extraction, some twelve to thirteen thousand, probably requires to be sifted. It seems to us that the Census offers a good opportunity to set the whole question regarding the point at rest; and it might be advisable for the Government to take steps to secure accurate returns regarding the number of Eurasians all over India, their occupations, the number of their children, and the proportion who are not being suitably educated. Till this has been accomplished and unimpeachable data are in the hands of Government, it might be judicious to delay action beyond what the Government of Bengal has declared itself ready to effect.

THOMAS EDWARDS.

ART. III.—THE RISE OF AMRITSAR, AND THE ALTERATIONS OF THE SIKH RELIGION.*

A MAR DĀS, † the third guru or Sikh Apostle, in his retreat at Goindwal on the margin of the River Biās, deplored the perversity of human nature which refused to acknowledge the divine origin of the Sikh religion, and to hasten to its standard. After the lapse of some thirty years since the death of Nānak, the number of surviving converts was still discouragingly small. ‡ In the midst of his labouring tribulation it was revealed to him in a vision, that there was a holy land to the west, containing every thing that was bright and perfect upon earth, a land which God himself had chosen as the seat of the Sikh religion, and to which millions would throng to receive the new evangel ||

Amar Dās accordingly directed his son-in-law and successor, Ram Das, to go in quest of the promised land. Whether, however, Ram Das had misunderstood his instructions, or the vision had not been definite in its indications, the sacred spot was not discovered without some difficulty. Ram Das directed his steps towards the west, and after several days' travel took up his abode in an open plain, beneath a solitary tree, which afforded grateful shade. In due time he set about constructing a tank for his followers and himself. While conducting the excavation, he unearthed a large jar of ancient manufacture. His curiosity led him to open it, when forth there issued a jogi, who, from a period long anterior to all profane history, had remained in a religious

* An account of the original religion of the Sikhs will be found in the preceding number of this "Review" under the heading "The Dewali at Amritsar," a title which I have now altered at the suggestion of several literary friends.

† The ten gurus were Nānak, Angad, Amar Dās, Arjan, Har Gobind, Har Ram, Har Kishan, Tegh Bahadur, and Gobind Singh. Nānak the first guru was born in 1469 A.D. Gobind Singh, the last guru, died in 1708 A.D.

‡ Cunningham states that forty-two years after the death of Nānak, his successor had not more than

double that number of disciples. As, however, the number eighty-four, which expresses the lakhs of forms of existence in creation, is of some sanctity and of frequent use among both Sikhs and Hindus, it is doubtful whether Cunningham has been justified in literally accepting Bhāi Kalu Singh's expression regarding Amar Dās,—“He held converse with eighty-four Sikhs.” But, at any rate, there seems no reason to doubt that at the time of Amar Dās, the number of Sikhs fell far short of what had been accumulated by his predecessors.

|| In this narrative of the rise of Amritsar I follow tradition.

trance in that circumscribed and apparently inconvenient tene-ment.*

The jogi told the guru, that he was in error as regards the spot indicated in the vision. It would be found a little further to the south. The guru at once abandoned his unavailing labor, and accepted the miraculous indication of the jogi. It may be mentioned, that the tank thus begun and abandoned by the guru was subsequently completed by the piety and munificence of his disciples. It is now known as Santokhsar or the Lake of Patience, and is situated in the outskirts of Amritsar. Nothing daunted, Ram Das set out with his mattock on his further explorations. In these again divine interposition was not wanting. He discovered not far distant some stagnant water in the forest. He was told that this water possessed such healing virtue, as to have actually cured a leper who had bathed in it. The holy Guru on enquiring into the circumstance is said to have obtained the following particulars :—

In those days there lived a woman, poor in worldly wealth but of exemplary devotion, and possessing in reality such beauty as poets have imaged only in their fancy. This woman took comj passion on a poor crippled leper who had lost his fingers and toes, and she consented to be his wife and faithful nurse. She maintained herself and him by begging. Whatever alms she obtained, she shared with him ; and wherever she went, she tenderly bore him in a basket on her shoulders. One day she wandered with her afflicted husband to the stagnant water which the guru had now discovered ; and the loving wife, foot-sore and weary, laid down her burden. She and her husband were soon seized with an imperious desire for their mid-day meal, and bethought themselves how it was to be obtained. After much discussion, during which the wife expressed her reluctance to leave her husband, it was decided that he was to recline under a tree in the cool and grateful proximity of the water, while she departed to the nearest village to beg their daily bread. The leper's powers of observation had been developed by leisure and travel. As he sat in his basket, he observed a black crow swoop down into the water, and emerge a dove of singular whiteness from its tiny wavelets. The leper saw that the water possessed marvellous cleansing properties, and he at once determined to test its efficacy on himself. Crawling from his basket to the margin of the water, he immersed his hand, when, lo ! new fingers sprouted from it, and

* See Dr. Hönigberger's "Thirty-nine years in the East" for some explanation of the pretended power

of suspension of animation attributed to jogis until quite recent times.

the limb was instantaneously made whole ! Much deliberation was not required to induce the leper to bathe his whole body. He emerged from the pool restored to health and the splendour of manly beauty, and he calmly awaited the return of his darling and faithful spouse from her mendicant excursion.

On arriving, her consternation knew no bounds. In the perfect proportions of the man who stood before her, she could not discover her husband, the recent crippled and maimed leper, and she shrank from his embrace with all the indignation of outraged virtue. In vain did he essay to explain to her the cause of his metamorphosis. She interrupted his narrative with tears and imprecations. Her belief was, that the stranger before her had killed her husband, and now presented himself as an unholy lover in her helplessness and bereavement. The quarrel waxed hot between husband and wife. She refused to accept his statements, and he felt mortified at the incredulity of his hitherto peerless spouse. Remonstrance and argument had no effect on her, and feminine obstinacy temporarily triumphed. With ceaseless objurgations and monitions of divine vengeance she hastened from the presence of the man she believed guilty of such great enormity, to mourn her darling leper, in some remote and forlorn solitude.

Such was the position of domestic affairs when Ram Das, a *deus ex machina*, appeared upon the scene. He assured the wife, that the man whom she had been spurning was in reality no other than her husband ; and he craved the husband's pardon from his too faithful wife. Ram Das appears to have been much more successful in his negotiations than most interposers in domestic quarrels. Through his kind offices the faithful couple were reconciled, they embraced his religion, and the *quondam* leper assisted him in enlarging the pool, building to it flights of ascending steps, and rearing on its margin, buildings for divine praise and prayer, worthy of the miraculous discovery of the water, and its still more miraculous virtue. The tank was called Amritsar or the Lake of Immortality. Akbar, the liberal and tolerant emperor of the period, made a grant of the land to Ram Das, and it became known as Guruchak or the guru's estate. The town which arose in the vicinity received the name of Ramdaspur from its founder.*

* There are other versions of the story of the leper. Some say the circumstance described occurred in the time of Arjan while the tank was being excavated. A painting and a brazen tablet on the spot represent the wife and the restored leper appearing before Arjan for the pur-

pose of adjusting their quarrel.

Malcolm states that Amritsar was "a very ancient town, known formerly under the name of Chāk ;" but of this I find no proof. The neighbouring village to which the leper's wife went to beg, was called Tung.

The year 1576 A.D. is given as the date of the foundation of the sacred reservoir. The particular spot where the leper was cured was, and is still, known as Dukh-bhanjani, or the destroyer of grief, the place which removes all sorrow from the heart. Guru Arjan, the son of Ram Das, added to the city of his father's foundation, and to the sacred edifices round the Lake of Immortality. The spiritual Peisistratus of his age, he collected the rhapsodies of his predecessors, and adding to them some prayers and exhortations of his own, compiled the Granth or Sikh Bible, for the edification of the faithful. Such treasure needed fitting tenement, and opposite the Dukh-bhanjani was reared the Harmandar, or house of God,* the Sikh Holy of Holies, to receive the divine compilation.

The Har Mandar, known to European travellers as the Golden Temple, stands in the centre of the lake, and is connected with the land by a spacious viaduct. The roof of the building is of copper gilt with gold. The floor and the outer portions of the walls are of marble, it is said, torn during Sikh supremacy from the tomb of the far-famed Empress Núr Jahan at Shahdera near Lahore. The temple, though in shape like a truncated coffin, is an imposing structure. To form it, three storeys of building rise gracefully over the lake. The roof is ornamented with tiny cupolas and Moresque decorations. The holy volume of the Sikhs, clothed with silken coverlets is watched over by a priest who receives the homage and offerings of his co-religionists. And Musulman musicians all day long chant to accompaniment of *sitar* and *sarangi* the secular or profane songs of their religion and calling, to unlock the hearts and sympathies of the Sikh visitors of the holy temple.

Arjan not only acquired great fame as a religious teacher and holy man, but great wealth as a horse-merchant and secular administrator of the Khalsa. He reduced to a fixed scale the previously irregular and unsystematic offerings of his followers, and despatched his agents far and wide to receive their forced or voluntary contributions. In imitation of the great Hindu fair at Hardwar in the beginning of Baisakh, the first month of the Hindu year, he established the Baisakhi fair at Amritsar. The Hindu Dîwālî festival at the close of summer he also utilized, and converted into a great secular and religious gathering of the Sikhs. The seasons when both festivals were held he deemed most convenient for his followers of both sexes to assemble at his sacred city. Apart from his commercial interests, he, the first guru to give full effect to the precepts of Nānak, saw the necessity,

* Har Mandar is, literally, the Vishnu, and in the "Prem Sagar" to temple of Hari, a name applied to Krishna, an avatar of Vishnu.

in his spiritual capacity, of bringing his followers into closer relations with himself and with one another, of periodically renewing acquaintance with them, and of reciprocating with them those kind personal offices which form the surest bond of affection between a religious teacher and his disciples. In this way, while adding to his private resources and the number of his retinue, he did more to unite the Sikhs and induce them to take an active and living interest in the political and spiritual welfare of the new religion, than all his predecessors put together had done by their stately doctrines and refrigerated secular theories.

Succeeding gurus added to the wealth, the grandeur, and the religious character of Ramdaspur. The city long retained the name of its founder, until the lapse of historical memory and the increased fame of the sacred tank led to the bestowal of its name on what is now the most populous and opulent city of the land of five rivers. As a commercial city Amritsar is most conveniently situated in the heart of the Panjab. Lying within the sub-Himalayan rain-belt, its natural irrigational advantages are great. These are supplemented, idly in summer and profitably in winter, by water courses which preserve the verdure of the earth and enhance its productive capacities. Amritsar is now, and has long been, the home of the Kashmiri shawl-weavers, who have found the Happy Valley under an otiose and apathetic ruler and grasping officials by no means a terrestrial paradise.* And to all these material advantages are added the contributions of the Faithful to the great temple, particularly at the Dīwālī and Baisakhi festivals, which are in the words of a Sikh gentleman,† to whom I am indebted for much of my information regarding Amritsar, the golden trees and the milch cows of the priests and professional mendicants of the Khalsa.

In close proximity to the Dukh-bhanjani is the Athsath Tirath, words which mean sixty-eight places of pilgrimage. Such is the copious number of famous Indian localities which, in the opinion of the Hindus, are the special haunts of the deity by whatever name known, and where praise and offerings are most grateful to his senses. It is supposed that Arjan built himself a hut on the Dukh-bhanjani while engaged in the construction of the tank, and that he used to bathe on the spot now called "Athsath Tirath" every morning before offering up his prayers and spiritual homage.

* The pitiable condition of this ruler's territories and his clearly proved and deeply rooted disloyalty to the British Government must soon bring into Political prominence the question how long such an administration as his will be allowed to

crush the energies of the fine people and defertilize the lovely country over which he holds independent sway.

† Sirdār Dyāl Singh, a Sikh gentleman, who has visited England, and made himself acquainted with our literature and our customs.

The spot on this account was held in reverence by his followers; and either Har Gobind or the later priests of the temple boldly declared, that bathing there had the same spiritual efficacy as visiting the whole sixty-eight places of Hindur pilgrimage. This was a transparent device to attract Hindus to the temple, and induce them to adopt the new religion. Whoever believed in the efficacy of the "Athsath Tirath," would feel no goads of conscience to visit the ancient places of pilgrimage, such as Hardwar, Gaya, and Benares; and he would be thus preserved from the effects of the vigorous reactionary teachings of the Brahmins.

I have mentioned * the Akalis' throne as the scene of the Sikh initiation. There a grand Darbar is held every evening when the Sikh priests appear in the blue uniform of their order, with all its curious trappings. To a stranger it is a somewhat imposing sight. It appears as if one was transported back to the age of the crusaders and knights in armour. The priests who an hour ago were seen in the crowd in ordinary white costume, appear now totally different beings with their blue robes, their battle-axes, their peaked turbans ornamented with glittering quoits, and their truly martial bearing. The demeanour of these men is perfect. They sit upright and motionless on their seats; their eyes are steady and expressive of determination and self-control; and when they are not occupied in chanting the Holy Granth, their features are indicative of profound contemplation. Perhaps, however, it is with them as with the boy in the Scotch song—

For a' sae sage he looks, what can the laddie ken?
He's thinkin' upon naething like mony mighty men.

Behind the Akalis' throne is the Akal Búngah, a spacious pavilion constructed by Har Gobind, the sixth Apostle. The three preceding gurus held darbars in the holy temple on the Lake. He it was who first set the temple aside for purely devotional purposes, and built the Akál Búngah to receive his disciples. In a short time, however, this also became too small to receive those who sought the religious gain of beholding the Apostle. He used then to sit on the balcony, while the spacious area beneath was filled to overflowing with his homage and tribute-bestowing followers. Here presents of horses, hawks, swords, and game, were piously offered to the guru, and here still, similar offerings to the temple are triumphantly displayed.

Arjan's love of pomp and power had excited the suspicions or the political hostility of the Emperor of Delhi. This was kept alive by the machinations of private and sectarian enemies. Arjan was seized and thrown into prison in the then cheerless

city of Lahore, where his life was soon brought to a close under the tortures of the myrmidons of the imperial fanatic Aurangzeb.* To Har Gobind, the son of Arjan, was left the duty of avenging the death of his father. It was perhaps with this object that he gave a new impulse to the Sikh religion. At any rate, the first material alterations of the religion of Nának must be held to date from his time. The skilful devices of Arjan, to induce the Sikhs to take an interest in their faith, were insufficient in Har Gobind's estimation. Theological concessions were deemed necessary to fulfil his religious and political aspirations. Sikh converts were allowed to invoke and offer homage to Brahma, Vishnu, and Shiva, the ancient Trinity of the Hindu dispensation.† Doubt having perhaps arisen as to whether his predecessors had actually prohibited the use of meat, Har Gobind boldly partook of man's usual animal food except the flesh of the cow, which was then, as it is now, an object of abhorrence to the Sikhs; and he proclaimed it good for his followers to follow his holy example.

The meekness and passive submission of the religion of Nának were changed under Har Gobind into independence and heroic activity. To give strength, consistency, and harmony to his political deliberations, he established the *Guru mata*, or council of the Sikhs, an institution which bore some analogy to the Agora

• اورا بستہ در ریگستان لاہور دہشتند از تابش آفتاب و شدت گرما و آزار مصلاں
چانداد

"Dabistan," page 234.

I cannot attach much importance to the statement, that the heat of Lahore assisted in the death of Arjan, unless obliging him to stand in the heat of the sun for several hours daily, was one of the forms of torture employed by his jailors. Otherwise Arjan must have been thoroughly injured to the heat of that part of India.

† This is stated on the authority of Bhai Nand, a Sikh writer. The statement is otherwise unsupported, but I see no reason to doubt it. Har Gobind's compromise with Hinduism

would be quite in keeping with his general character, and with the temper of the Sikh faith both in his time and since. I am not unaware of the fact, that the author of the Dabistan spoke of Har Gobind as a believer in one God. But the other gods of the Hindu pantheon seem to have held in the estimation of the early Sikh gurus, even of Nának, as previously shown, the same relation to the Sovereign of the universe, as the minor deities of Greece did to the great Ruler of Olympus in the age of Æschylus.

‘Απαντ’ ἐπράχθη πλὴν Θεοῖσι κοινανέν,

‘Ελεύθερος γὰρ οὗτος ἐστὶ πλὴν Διός.

Æschyli Prom. Vincit.

The minor deities could do every thing but regulate human fate and Supreme Deity alone.

of the Homeric age in Greece, or to the council of the Persian followers of Yazdan, the benevolent deity of the universe.* Hand in hand with religious instruction, proceeded warlike exercises; and the temple of the guru became a *caserne* which resounded with the din of martial weapons and of hostile preparations. His predecessors had indeed tolerated secular occupations, but to these he added the pursuits of war and the chase. He became an active rider and expert swordsman; and to acquire the other accomplishments of a soldier, he embraced military service under the Emperor Jehangir. Not only were the guru's converts from among God-fearing men and priest-loving women of stainless lives, but the fugitive and the criminal gathered to his standard and his presence.† In the successor of the divine Nānak, the spiritually and temporally harnessed guru before them, they all found a genial man of the world, who could make allowance for youthful eccentricities or fashionable irregularities. He initiated the new-comers in his faith, bestowed on them his apostolic blessing, and instilled into their minds the cheerful and unctuous belief that to be a member of the Sikh faith was sufficient after death for an unquestioned admission to the state of repose which was the climax of all Hindu mental yearnings and hopes.‡

* The translator of the Dabistan states that the Guru mata was established by Gobind Singh, but it is referred to in the text of the Dabistan as then existing. The author of the Dabistan was, according to his own

statement, a contemporary of Har Gobind. It is exceedingly doubtful whether he survived until Gobind Singh's apostolate, but in any case he certainly never wrote its history.

† "Dabistan" page 236. هر کس که از جای روگردان شدی پناه باو بردی

‡ "Dabistan" page 239. روز جزا مریدان مرا از اعمال نپرسند

Cunningham states that Har Gobind became "involved in difficulties with the Emperor about retaining for himself that money which he should have disbursed to his troops." I find Cunningham's authority for this statement was Captain Troyer, the translator of the Dabistan—"Har Gobind became involved in many difficulties; one of them was that he appropriated to himself the

"pay due to the soldiers in advance; he carried also the sword against his father; he kept besides many servants, and was addicted to hunting. Jehangir, on account of the money due to the army, and of the mulct imposed upon Arjau Mal, sent Har Gobind to the fort of Gwalior, &c." On referring to the original Persian, I read—

اورا دشواری ها پیش آمد یکی از آن است که وضع سپاهیان پیش گرفت و برخلاف پدر شمشیر بست و نوکران نگاه داشت و شکار کردن گرفت حضرت حنث مکانی بنابر طلب باقیات مطالبه که بر آئین جریمه بر ارجن مل مقرر فرموده بودند هر گویند را بگوالیار فرستاد

"Dabistan" page 234.

The arms of distinguished Sikhs are preserved in the Akál Búngah, and are actually worshipped by the ignorant followers of Baba Nának. Conspicuous in the armoury is the *gurz* or mace of Har Gobind, a weapon to wield which with facility would require the strength of Ulysses, Ram Chandar, or some other divinely reinforced hero. Conspicuous also are two ponderous swords, useless to men of this degenerate age, but plied with dexterity in the era of the last guru, by the religious warriors Jainal and Buchetar. The latter is said, with one of these weapons, to have cut off the trunk of an elephant in battle by a single blow. Curious it is to discover among these holy weapons, maces, clubs, pistols, battle-axes, knives, daggers, etc., twenty-seven in number, a polished *Firinghi kirich*, or sword bearing the royal arms of England, purchased by a modern Sikh chief on the occasion of his visit to Calcutta in the reign of Ranjit Singh, and subsequently presented as a grateful offering to the temple. Its finished workmanship and polish give it the air of a Christian slave among a Pagan people. Let us hope, it is a benign deity to those who worship it!

The Akal Búngah, besides these weapons, contains some huge copies of the Granth Sálíh or sacred volume of the Sikhs. These are kept covered with silken coverlets as befits their worth and sanctity. The man who uncovered them and the mili-

Here there is not one word about money due to the army, about Har Gobind's criminal misappropriation, or about his having "carried his sword" against his father. The translation of the passage is this. "He had many difficulties to contend with. One of them was, that he adopted the style of a soldier, wore a sword contrary to the custom of his father, maintained a retinue, and began to follow the chase. The Emperor, in order to extort from him the balance of the fine which according to the penal law had been imposed on Arjau Mal, sent him to Gwalior, &c."

I might suppose that Troyer had translated from a different text, and that the Dabistan has since his time been altered at somebody's instigation, if some of the blunders of Troyer's translation were not so very palpable. For instance, assigning to the expres-

sion *barkhilaf-i-pidar shamsher bast* the meaning that Har Gobind bore arms against his father, is not only opposed to fact and to the verbal and grammatical interpretation of the passage, but it is also opposed to the whole tenor of the account of both Arjau and Har Gobind given in the Dabistan itself. If the Persian writer had intended to convey the idea which Captain Troyer does, he would have written *ba mukabila-i-pidar shamsher bast*; but this, though grammatical, would not have been true, for Har Gobind was devotedly attached to his father, and even vowed deathless vengeance on his father's enemies. It is indeed hard that the fame of Har Gobind should have been tarnished by the blunders of a translator. Even Dr. Trumpp in his recent *magnum opus* on the Sikh religion has unguardedly repeated the strange calumny.

tary weapons for my inspection, was the priest who had initiated the new converts into the Sikh religion as previously described. He was a man who had obtained the dignity of Nirmillah or pure of heart and sinless priest, and the only one then allowed to handle the weapons or initiate converts into his religion. In the religion of Gobind Singh, great is the reward for the initiation of a Sikh, so this man must have an untold balance of spiritual beatitude accumulated to his credit.

Lingering round the lake, my attention is particularly called by my Sikh companions to the cinerary tomb, and plaintive legend of Atal Rai, second son of Har Gobind, presented to the world by fate apparently to show how relentlessly it could destroy youth and virtue.

Ostendunt terris hunc tantum fata, neque ultra
Esse sinunt.

He was an intelligent and highly gifted boy, and his courteous temper and manners gained him the love of his playmates. He also acquired a high reputation for sanctity, and it was thought, if he had lived to survive his father, he would have been a perfect guru even as Nának. One of his playmates who owed him a debt on being vanquished in some boyish game, happened during the ensuing night to die a sudden death. In the morning young Atal repaired to his late antagonist's house, and, moved by no awe in the presence of death, thus addressed his late playmate:—"It is not right that you should go, leaving your debt unpaid. Give me what you owe me, and then you may go." At these words the deceased boy arose to the astonishment of the bystanders, and began to renew his play with Atal.

This occurrence was at once bruited abroad as a miracle, and an account of it soon reached his father's ears. The father exclaimed, according to one tradition, "Two swords cannot find room in one scabbard. The time when one must perish is very nigh." By two swords in one scabbard the guru meant two prophets in the same community. The son had begun to work miracles, which meant the early demise of the father, or at any rate, that his presence was no longer necessary upon earth. According to another tradition, the father on hearing of the miracle wrought by his son, summoned the boy to his presence, and angrily chid him for his thoughtlessness and presumption in reversing the decree of destiny. It was in praise of God, in contemplation of His veritable name, and in the accomplishment of good works, gurus should display their miraculous powers. On hearing this, the pious and dutiful youth replied that as a life was demanded by God and he had withheld one, he would offer up his own as a substitute. Upon this he forth-

with laid himself on the ground on the site of his present tomb, and yielded his spirit to the Lord of Destiny.

When this legend is stripped of its religious and poetical framework, there remains the fact that Atal Rai was a promising youth, beloved by his parents, and, to use the expression in which it was related to me, *har dil-i-aziz*, dear to every heart. His premature demise was deeply mourned by his father, who looked on him as his divinely born successor. Over the spot where he died, and where his remains were reduced by fire to their parent elements, Har Gobind built the present tomb to perpetuate the memory of his darling boy. The place became a favourite resort for the father, and it was there he loved best to distribute alms to the needy. Even still, the Sikhs believe that alms bestowed there have much more efficacy than elsewhere. Hence every evening there are special assemblages of the poor to receive temporal, and of the wealthy to receive spiritual favours, at the shrine of so much worth, and purity, and filial obedience. Such to the world are the results of the embellishments of poets and priests!

The tank near Baba Atal's tomb is known as the Kaulsar or tank of Kaulan. This was a Musalman woman, according to some, the daughter of a Qazi, but, according to others, a dancing-girl, whom Har Gobind took into his zenana, no doubt, by divine command. His devoted followers say, that Har Gobind yielded to no unworthy passion for this female. He loved to gaze on her beautiful face, and contemplate her manifold charms, and his piety was stimulated by this harmless occupation. As a reward for her devotion to the guru, her memory is still preserved among the saints and benefactors of the Khalsa.

Two gurus, Har Rai and Har Kishan, in succession to Har Gobind gave spiritual and temporal orders to the followers of guru Nānak; but appear to have made no noteworthy changes in the religion that had been transmitted them. To them succeeded the third son of Har Gobind, Tegh Bahadur, who left his own peculiar impress on the religion of his predecessors. Brahmins and saints were attracted to the guru's abode, and fêted and pampered with earthly luxuries. Hindus were spoken of with commendation who had rehabilitated places of pilgrimage, and restored the images of the gods to their ancient temples. Bhang, the intoxicating and maddening infusion of the Indian hemp plant, which had been forbidden by Nānak, was imbibed by Sikhs under the guru's express authority. The reputation of working miracles began to attach to the Sikh apostle. In popular estimation he exorcised demons, made lions play around him with all the harmlessness of domestic animals, miraculously conferred children on the childless, and destroyed obnoxious animate and inanimate objects with his

anathemas and maledictions. He tolerated extravagant reverence for his own person. He besought his followers to make war on the Musalmans, and he threatened those who disobeyed him with the divine vengeance. He effected compromises with robbers, and he encouraged evasion of payment of the imperial revenue, thus reversing for his followers the maxim of the divine teacher of the Jews, "Render unto Cæsar the things that are Cæsar's."*

The Sikh chronicler of Tegh Bahadur's travels describes his struggle for position, and records homicides committed by him on apparently slight provocation.† A Musalman historian long after the struggle of the period makes statements to the same effect, but more outspoken in their character. He relates that Tegh Bahadur became very powerful, gathered some thousands of followers to his standard, finally threw in his lot with a Musalman adventurer, and joined him in plundering and devastating the province of the Punjab. The officials of Aurangzeb wrote to that monarch that danger was apprehended to the empire from Tegh Bahadur and Hafiz-i-Adam. The emperor directed his officials to banish Hafiz-i-Adam beyond the Punjab border, and imprison Tegh Bahadur. Both these directions were carried out, but soon an additional order was issued and obeyed, namely, to execute Tegh Bahadur, cut up his dead body into pieces, and hang them up in different parts of the imperial capital as a terror to disturbers of the public peace and to all enemies of Islam.‡

The spirit of revenge, though justly reprobated by the superior intellects of ancient Rome§ and by contemporary civilization, is alien to no age and country. In the polished writings of the

* My authority for this paragraph is the book of "Travels of Guru Tegh Bahadur and Gobind Singh," written by a Sikh follower of theirs. See Sakhis 5, 8, 16, 21, 29, 32, 37, 40, 43, and 46. I assume that the Sakhis I have quoted, refer to Tegh

Bahadur, though with Dr. Trumpp I am at a loss to state with confidence where the Sakhis regarding Tegh Bahadur end, and where those relating to Gobind Singh begin.

† See "Travels of Tegh Bahadur," Sakhis 48 and 53.

‡ بعد چند روز حکم دیگر درباره تیغ بہادر رسید کہ اورا کشتہ و جدش را

الامر بوقوع پیدوست

چند حصہ نمودہ اطراف شہر بیاویزد

"Siyar-ul-Mutaäkhharin," Vol. II, page 26. The Sikhs, however, say that after Tegh Bahadur's execution, his body was made over to his followers. His cinerary tomb is now pointed out at Delhi, but it is doubtful whether its construction was not an interested device of subsequent Sikh priests. Aurangzeb had all the

malignant fanaticism to issue and enforce the order cited in the Siyar-ul-Mutaäkhharin.

§ Juvenal who could revenge himself on his enemies better than most literary men of his time or since, knew how to preach the best sermon against revenge. See his XIIIth satire.

Greek historian the gratification of revenge is described as the sweetest feeling of mortals *; and even the most Christian of poets thought it not unbecoming his religion and philosophy to attribute to one of the denizens of his Inferno just anger for his violent death yet unavenged.† It is not difficult to understand how, apart from Tegh Bahadar's last dying message of vengeance to his son Gobind, the son's whole soul should be up in arms against the power that had executed his father with such circumstances of barbarity.‡ These feelings and this spirit were, as we have seen, first evoked under Har Gobind, but it was under the tenth and last guru that they received their full development. At the death of his father, Gobind was but fifteen years of age, and therefore not yet ripe for great achievements. He passed the remaining years of his minority in retirement studying Persian and Sanscrit || literature, attaining skill in the use of martial weapons, and preparing himself for the great work of vengeance which had been left to him as an heirloom.

It can hardly be supposed that the Sikh religion as time passed by, could preserve a purity granted to the adolescence of no other *culte*. Gobind had certainly no object in restoring the pure faith of Nānak, and instilling into the minds of the Sikhs the spirit of the earlier gurus, which he derided as one

* Thucydides cites a Greek proverb to that effect: "Ἀμα δ' ἔχθρὸς ἀνύσσει ἐκγενησόμενον ἡμῖν καὶ τὸ λεγόμενον πον ἥδιον εἶναι."

† Dante confesses that when Geri Del Bello showed his temper, and "cut" his poetic relation on meeting him in the Inferno for not having avenged his violent death, his conduct only enhanced Dante's pity and estimation for him.

Onde sen gio

Senza parlarmi, si com'io stimo;

Ed in cio m'ha el fatto a se piu pio.

‡ The Sikh account represents Gobind Singh as subsequently teaching the duty of revenge to the grandson of Painde Khan whom Har Gobind had slain. It is said, that the Pathan youth profited by the lesson and assassinated his preceptor, Sakhi 98.

|| Dr. Trumpp states that "Gobind never attempted the study of Sanscrit, though he occasionally tried to imitate it in his compositions." Now if a man had never studied a

line, say, of Greek, he would not find it easy to imitate Greek authors. Moreover, a large portion of Gobind's Granth is in a great measure taken from the Hindu Puranas, and he could hardly have accomplished this, if he had never turned his attention to the study of Sanscrit. It is also stated that on the occasion of his celebrating the *homa* or burnt-offering of the Hindus, to be subsequently referred to, he consulted the Vedas himself. I see every probability in favor of his possessing at any rate a smattering knowledge of Sanscrit and none whatever against it. It is common enough for the followers of a religion to deny the secular accomplishments of its founder. For a long time it was maintained by the Christian Church, that our Saviour was unable to read or write, but Dr. Farrar has recently admitted that Christ was an accomplished linguist. See Farrar's "Life of Christ," Vol. I, pp. 85 to 92.

of meekness and unmanly submission. Indeed the subjective doctrines of Nānak would probably have ceased to influence the Sikhs of the age of Gobind, if Nānak's successors had not allowed the religion to fall to the level of popular comprehension, and if they had not infused into it a new and vigorous spirit redolent of arms and war, breathing the duty of revenge, and inculcating the necessity of the preservation by whatever means of the chosen people of the Khalsa.

Gobind, who in imitation of the martial Rajputs of his age, surnamed himself Singh or the lion,* and gave the same appellation to his followers, devoted his great mental and physical powers to the completion of the political work of Har Gobind and Tegh Bahadar. He planned the extermination of the Muhammadan power and the erection of a Sikh empire in its place. For this object he employed all the faculties of the politician, the poet, the fanatic, and the hero. His mind had been cultivated with assiduous care; he had learned all the martial skill and exercises of his country; and to attain the spiritual power and perfection of which he felt the necessity for the great task he had imposed on himself, he performed by the aid of a Brahmin sun-worshipper famed for his skill in sacred lore, the ancient Hindu ceremony of the *homa*; and he offered a human sacrifice to the goddess at Naina Devi.†

The grave custodians of the sacred book of the Sikhs, on seeing the first-fruits of the new apostolate, became apprehensive for the religion of Nānak. Guru Gobind sent to them for the Granth of Arjan, no doubt, with the object of altering it to suit his own views and ambition. The Sodhis to whom the volume was entrusted, flatly refused to allow their holy volume into his possession, and slightly told him that if he wanted a Granth, he must write one himself. He forthwith set to work, and, naturally, not having sufficient original materials at hand to fill a volume of the size of Arjan's Granth, he proceeded to paraphrase the Hindu Puranas in the Hindu dialect of his age. In this manner he, in due time, produced a Granth equal, at any rate, in material weight and dimensions to the more orthodox volume of his predecessors!‡

* The word Singh had first been used as a distinctive epithet by the martial Kshetriyas.

† Naina Devi is both the name of the place and of the goddess worshipped there. See an account of the alleged manifestation of the goddess to the guru in "Gobind Singh ki Sakhian," Sakhi 17.

‡ Another reason for his transla-

ting the Puranas is assigned. Many Sikhs of his time felt a curiosity to make themselves acquainted with the contents of the Hindu sacred books; and Gobind thought that if he translated these himself, he would save his followers from association with Brahmins, until then the only expounders of Hindu sacred writ.

The goddess of courage, variously called Chandi, Durga, or Bhagawati, was the diety to whom the guru's most ardent prayers were addressed. He declared with questionable veracity that she had been first worshipped by Guru Nānak; that she had been propitious to Angad, Amar Das, and Ram Das; and that Arjan, Har Rai, Har Gobind, and Tegh Bahadar rose to the highest honours under her divine protection.* He directed that in her honour arms should dignify the persons of all faithful Sikhs, and that they were never to be without sacred steel in their possession. Steel was to be the safeguard of the followers of the Khalsa, not only because of its own natural strength, but also because in its lustre the splendour of the countenance of the goddess of courage was always reflected. United with her worship the new attribute of all-steel or the invincible was given to the Almighty :—

Eternal God, thou art our shield,
The dagger, knife, the sword we wield !
To us protectors there are given
The timeless, deathless, Lord of Heaven ;
To us all-steel's unvanquished might ;
To us all-time's resistless flight ;
But chiefly thou, protector brave,
All steel, wilt thine own servants save.†

The ceremony of initiation into the Sikh faith by drinking water in which the guru had washed his feet, was changed into lustration by water which had been sanctified by the immersion of steel accompanied with corresponding devotions.‡ And for the beads which he said his predecessors had worn, he substituted the sword, the knife, and the dagger, declaring at the same time that by this means the hawks would be destroyed by the birds on which they had been wont to prey.§

The caste distinctions which the early Sikh gurus had failed to abolish by indirect teaching, were found an impediment to the desired union of the members of the Khalsa; and caste dis-

* See Guru Gobind's Aidas or petition (*Arzdasht*). The verses which recount this are inscribed over the southern portal of the Har Mandir. Another interpretation, by which the gurus rank next as divinities to Bhagawati, is also put on these verses by the Sikh priests.

† Readers unacquainted with the Gurumukhi character, will find the original of this hymn transliterated in Sir John Malcolm's "Sketch of the Sikhs." All-iron, that is, the

untiring (*ākāmaros*), or invincible is an epithet of God, as all-time, that is, knowing not the effect of time, namely, death is. Compare Erasmus Darwin's spirited lines to steel. The tenth Guru would have gladly hailed our poet as a disciple.

‡ I have already described Guru Gobind's pahul or initiation ("Calcutta Review," April, 1880).

§ "Travels of Guru Gobind Singh," Sakhi 89.

tinctions were therefore expressly abolished.* Every Sikh was to wear trousers fastened by a waistband, instead of the insecurely tied and unsoldier-like *sāfa* of ordinary Indian wear. Hair was to be removed from no part of the person, and thus whiskers and mustachios would render the appearance of the guru's followers more martial, while at the same time, long hair tied round the head and enfolding pieces of steel would be a protection to his warriors against the clubs and swords of their enemies. Hair on the body and a comely roll of hair on the head was, the guru declared, the cloak granted by the goddess of courage to all true Sikhs. A Sikh must not be unprepared, even when at his meals, and so he is never to eat bare-headed, and never to sleep undressed. The day must begin by offering homage to the god of the Khalsa, and morning ablutions, so necessary to health in all countries, are never to be neglected. The permission to eat all flesh, except that of the cow, and the prohibition to abstain from the undoubtedly pernicious drug, tobacco, were repeated for the faithful. But the use of *bhāng* reprobated by Nānak and several of the gurus who succeeded him, was encouraged by precept and example, as tending to stimulate Sikh warriors to deeds of daring and martyrs' deaths.†

A considerable portion of Gobind's precepts and practices seems to have been derived from the Quran and Musalman traditions. Having, in the latter part of his career, in a great measure broken with Hinduism, he found in the Persian language into which the Quran has been translated from time immemorial, doctrines which he at once saw would be suitable to his followers, and which he borrowed for their adoption and edification. The guru believed, with the Prophet of Makka, that every age had its book of revelation, and, as we have seen, he confidently compiled his own. In the same manner as Muhammad admitted the mission of the prophets prior to himself, but said that he, the last of them, had come to point out the true path, Gobind admitted the missions of the Deityas, the Deotas, the Sidhs, Gorakhnath, Ramanand, and even Muhammad himself; but stated that these had misled mankind, and that consequently he, Gobind, had been specially called by God to propagate his true worship and communicate to men his veritable name.‡ In the same way, too, as the prophet of Makka repudiated the notion of his own divinity, Gobind said he was as

* *Charon baran ke eko bhai*. Gobind likened his contemplated blending of the four castes of the Hindus to the blending of pāu, lime, betel-nut, and catechu, which combined form the famous stomachic and lip-

dye of the Indians.

† See "Travels of Guru Gobind," Sakhis 73, 102, and 112.

‡ See the Quran, chaps. II, XIII, XXI, XXIII & XLVI, and Gobind Singh's *Vichitr Natak*.

other men, a beholder of the marvels of heaven ; and he threatened any one who regarded him as a god with all the torments reserved for the impious.* The Sikhs, like the Musalmans, were to bow them before nothing earthly save the divinely inspired book of their faith, which like the Quran was the great miracle which God had made manifest for the guidance of human beings.

One of the first acts of the Arabian Prophet, was to induce the the men of Madina to enter into a compact not to kill their female children ; and denunciations against those who violated it were subsequently often repeated in the Quran.† This very elementary principle of morality had apparently never occurred to the Sikh predecessors of Gobind, although they knew that female infanticide on account of the pride of birth of parents was widely practised around them.‡ The Musalman injunction not to slay females commended itself to Gobind, as a useful device to increase the number of his followers and his warriors ; and he laid special force on this precept of his religion.§ Almsgiving which had been carefully inculcated by the prophet of Makka, was made an imperative practice of the Sikhs, so as to support the ever increasing number of followers and fighting men of the Khalsa.|| The alms offered not being found sufficient for the desired object, permission was given to resort to the *ultima ratio* of the stronger, in the same fashion as the great Arabian enthusiast allowed his followers to enrich themselves with the spoils of the caravans of the Makkan "infidels" who traded between Syria and Arabia.||

Gambling, perhaps as leading to dissensions among the

*See the Quran, chap. VII, and the Vichitr Natak.

† See the Quran, chaps, XVII and LX.

‡ It was practised, not only by the Indians and the ancient Arabs, but even by the ancient Greeks. See Sale's "Preliminary Discourse to the Quran."

§ See the Rehit Nama of Pralad Rai. Napoleon Buonaparte, who parted largely of the spirit of Muhammad and Gobind, and who, if he had been born an Asiatic, would probably have founded a new religion as well as a new dynasty, thoroughly understood the advantages of allowing its free growth to the population of a state. "Whom sire," said Madame de Staël to him, "do you consider the greatest woman?" "She, Madame,"

was the Emperor's reply, "who has the most children." Madame de Staël had given birth to none, and was for this reason and for others, useless in Napoleon's estimation to France.

|| See the Quran, chap. XVII, Gobind Singh ki Sakhian, Sakhi 81, and Nand Lal's Rehit Nama. The Sikhs were obliged to give a tenth part of their property in charity, but, notwithstanding the authority of Carlyle (Lectures on Heroes), the definite portion of a man's goods which he was obliged to contribute as alms, was not fixed by the prophet of Makka. See Sale's "Preliminary Discourse to the Quran."

|| See Sir William Muir's life of Mahomet, Vol. III, page 64, *et seq*, and Gobind Singh ki Sakhian, Sakhi 26.

brotherhood of the elect, was forbidden by both religions.* Perhaps, too, with the same object the relations of the sexes were as jealously guarded in the Sikh as in the Musalman faith. The blue dress of Musalman zealots was adopted by Gobind and his Sikhs. According to the Quran, animals strangled were not to be eaten. Gobind's injunctions forbade the members of the Khalsa to eat the flesh of any animal whose head had not been severed from its body by a Sikh with one single blow. Like Muhammad, Gobind ordered his followers to abstain altogether from the society of infidels. The soft songs of women, mirth, and other pleasures of the world reprobated by puritanical Musalmans were to be avoided, lest Sikhs should be drawn from their allegiance to the Khalsa, and learn to forget their sacred duty of hatred of the Musalman name.†

The laws of warfare were the same in Sikhism as in Islam. Infidels and those who set themselves up as rivals to the religious teacher, were to be mercilessly destroyed together with their wives and children. It was the duty of the Sikhs as of the Musalmans to die fighting for their faith; and the martyrs of the new Indian religion, known by the Musalman name *shahid*, were to have their exceeding great reward in a future state, corresponding in degree, though not in kind, to the beatitude of the Arabian prophet's elect among the cool fountains, the delicious streams, and the blue-eyed maids of paradise. And then, the Sikh guru, rising to the height of religious intolerance and fanaticism worthy of the Kareshi fanatic, declared that it was lawful to slay Musalmans wherever they were found; and equally lawful to assault and plunder Hindus and divide their property among members of the Khalsa. The countries of even unoffending Musalmans should be devastated with fire and sword, and all opposition from them met with slaughter and extermination.‡ It is such teaching as this, which nerved Hasain to his martyrdom at Karbala; and it is the same teaching which led Banda, the general and successor of Gobind, to die amid fearful torments with all the courage, the cheerfulness, and the sublime devotion to his faith of a martyr of the early Christian Church. §

* See Sale's "Preliminary Discourse to the Quran," pp. 88-89.

† See Nand Lal's *Rehit Nama* and Gobind Singh ki *Sakhian*, Sakhis 65, 82. The latter sakhi in particular, is full of highly ascetic precepts.

‡ See Sir John Malcolm's "Sketch

of the Sikhs," pp. 187 to 194; *Guru Gobind Singh ki Sakhian*, Sakhis 18, 44, 60, 65, 69, 70 and 83; and the Quran *passim*, but especially chaps. VIII and IX.

§ I here adopt the narrative of the "Siyar ul Mutaakhirin."

اما عجب نصیبي ازان جماعت مسموع شده كه در كشته شدن بكي

بر ديگرے سبقت مي جست و منت جلاذ مي نمود كه اول اورا بكشد.

Gobind did not neglect to enlist the sympathies of women in his favour, though, like the prophet of Makka, he appears to have left no instructions regarding their forms of prayer or their initiation in the new religion.* They offered him homage, however, in his wanderings, ministered to his necessities, and received salvation from him as the reward of their attentions. † Childless women who visited him, miraculously received the gift of children. Mothers, he thought, could expiate the dread crime of infanticide by simply bathing in full costume in a sacred tank, he indicated. Women are said to have fought in his battles, and to have been wounded on behalf of the Khalsa; and it is recorded that the saintly and childless Mai Bhago, attired in Sikh trousers and turban, and armed with a ponderous javelin, watched with the faithful Sikh guards over the guru in his nightly slumbers. ‡

This is a very remarkable statement of the enthusiasm of the early Sikhs. Compare the epistles of Ignatius, Bishop of Antioch, to the Church at Rome, epistles whose authenticity has been in my opinion idly questioned.

* In the 71st Sakhi of "Gobind Singh ki Sakhian," it is stated that the Guru explained to his wife Sita the Yoga philosophy; but it is not stated that these spiritual secrets were communicated to other women. Khadija, Muhammad's first wife, one of the four perfect women according to him, was deemed worthy of participation in spiritual secrets, but he, for the most part, ignored the spiritual needs of women.

† See Sakhi 17 in "Guru Gobind Singh ki Sakhian."

‡ "The guru ordered Mai Bhago to wear a *kachh* and a *pecha*. She adopted this dress, and, moreover, armed herself with a javelin, weighing a maund and a quarter. She became very pious, and devoted herself entirely to God and the guru. She always remained in the guru's camp, and used to guard his bed with ten other Sikhs who were under her orders. All respected her as a goddess, and the guru was highly pleased with her."

"Travels of Gobind Singh" translated by Sardar Attar Singh, C.I.E., Chief of Bhadour, Sakhi 54.

M. MACAULIFFE.

ART. IV.—ORIENTAL FOLKLORE, BY E. REHATSEK.

Mámún and the old Persian.

IT is related that, when it occurred to the mind of the Prince of the Believers, Muhammad Abyn, to deprive of the succession, and of the Khalifate, his brother A'bdullah Mámún, who was at that time Governor of Khorásán, he wrote him a letter to inform him that he stood greatly in need of his presence in order to entrust him with a most important affair; he requested him to leave, as his substitute in Khorásán, a man capable of governing that province with a strong hand, and forthwith himself to travel to Baghdád. At the same time the spies entertained by Mámún in the capital, wrote to him that Abyn intended to deprive him of the succession, and to proclaim his own son Músa, heir presumptive to the Khalifate. When Mámún had received and perused the letters, he consulted his viziers, who advised him to temporize, to keep the Khalif at bay, to allege as an excuse the vastness of the territory of Khorásán surrounded as it was by infidel nations, who were always on the look-out for attacking it; and lastly, that he could not find any one who might take his place. After Mámún had replied to his brother in these terms, Abyn again sent him letters, soliciting him to come; adding also that he would detain him in Baghdád for a very short time, merely to avail himself of his advice in an affair of the greatest moment, the import of which he could not communicate in writing. Mámún showed these new letters of the Khalif again to his viziers, whom he requested to tell him what to do, but they could only repeat their former advice; accordingly Mámún replied nearly in the same terms as before. On the other hand, the spies whom Abyn maintained in that province, informed him in their turn, that Mámún was on his guard, preparing for defence, and that all his viziers concurred with him in his resolution to offer resistance. Then Abyn, despairing to decoy his brother into the net, imprisoned all the partizans and friends of Mámún who happened to be in Baghdád, and deprived them of all the property he could get hold of.

When this news reached Mámún, he was greatly troubled, and again assembled his viziers in council, who unanimously persisted in their first advice, and encouraged Mámún to persevere whilst waiting for a better turn of fortune. This he did; and Abyn, finding his brother so unwilling to come, no longer waited for him, but invited all his subjects to pay homage to his infant son,

All complied, and swore allegiance to Músa, who received the surname, *Nátek-bi-l-hagg* (speaker of truth), although he was not yet able to utter a truth or a falsehood. Aryn entrusted the education of this child to A'ly B. E'sa B. Mahán, who had for a long time been Governor of Khorásán, and had so well treated the people and captivated the nobles by his liberality, that he had acquired immense popularity. Being questioned by the Khalif on the affairs of Khorásán, A'ly gave him all the information required, and added, that if he were again to be sent to that province, scarcely two men would refuse to obey him. Therefore Aryn appointed him Governor of Khorásán, and of any other countries he might occupy; he gave him large sums of money, the greater portion of his army, and as great a quantity of ammunition as he wanted.

When Mámún heard of these preparations, he wavered, because it appeared to him that he had not sufficient forces to oppose to A'ly B. E'sa. He having mounted a horse to ride to one of his villas, where his viziers had assembled to deliberate concerning the present emergency, a decrepit old Persian made his appearance, who requested him in the Persian language, to redress some grievance. Taking compassion on the decaying age of the Persian, Mámún ordered him also to be mounted, to be led to the place where he himself was going, and there to be introduced to his presence without any further permission.

Thus it happened, that, whilst Mámún was sitting with his viziers in the council-chamber, the old man was ushered in, and he beckoned to him to take a seat; then, turning to his councillors, he informed them of the doings of Aryn, of the imprisonment of his own adherents, of the confiscation of their property, and of the mission of A'ly B. E'sa. Mámún believed that the old man had no knowledge of Arabic, and that, being burdened with anxiety concerning his own affairs, he would pay no attention to the discussions of the council; wherefore also the viziers, who perceived that Mámún entertained no suspicious whatever about the old man, spoke freely on the subjects for which they had been assembled.

• The affair in hand being under discussion, one of the viziers said:—"I, for my part, am of opinion, that foreign soldiers ought to be enlisted who know not A'ly B. E'sa, and that he ought to be attacked with such forces."

"It seems to me," continued another, turning to Mámún, "that you ought immediately to send envoys to the Khalif to excuse yourself, and that you ought to obey all his behests, whilst waiting for the aid of God. Because, if you abandon your right of succession in consequence of superior force, as is well known to

everybody, you will always have a most evident ground for re-vindicating your rights when you are able."

"My opinion is," said a third, "that you should collect all your faithful adherents, and with them attack some infidel province to allay their scruples against disobeying the Khalif. We shall fight bravely, and hope that God will grant us the victory. Having become masters of a powerful State, our position will be more firm, so that we shall gain many adherents in the empire of the Khalif, and shall be able to wage a holy war, until God has accomplished His high design."

Another said:—"Let us shut ourselves up in some fortress in which we may wait what turn affairs will take."

Lastly, another spoke as follows:—"According to my opinion, O! Amyr, the best plan for you would be, to take refuge with the king of the Turks, and so claim his protection against a treacherous and covenant breaking brother. Do not all princes, when a calamity befalls them from which they cannot escape, act thus?"

This expedient pleased Mámún greatly at first, but after a little reflection he said:—"Am I then to give an opportunity to the Turks, who are infidels, to attack Musalmáns?" Then he gave his councillors leave to depart, and they did so.

Casting a glance at the spot where the old Persian was sitting, Mámún recollected him and made him a sign to come forward. Then he called for an interpreter through whom he intended to ask the man who he was, and what he wanted. The old man replied in Arabic, "O! Amyr," said he, "I have come about an affair, but have here found one more important and more worthy of solicitude." Mámún replied:—"Say what you like; it will serve for talk," and the old man continued: "O! Amyr, when I presented myself to you, I could not be numbered among those who love you. But now, God has filled my heart with great affection toward the Amyr."

It is said that there are three kinds of love. The first and greatest, which embraces the interior and the exterior of a man, is innate love, and such is love towards God, the Maker and Producer of everything. The second is factitious, such as the love of the benefited towards the benefactor. Lastly, the third is accidental love, of which there are two species: the first is, that which resembles innate love, because its power extends to the interior and to the exterior; and the second is, the love of subjects for their princes, and of slaves for their masters.

"But I say to the Amyr, may God exalt him, that I feel myself attached to the Amyr by three kinds of love: that of attachment, of benefit, and of the occasion. If the Amyr

accepts my affection, realizes my hope, accomplishes my wish, invests me with the robe of intimacy, and honours me by allowing me to consider myself one of his followers, he does a mere act of generosity without having any need of it ; but his servant hopes to reciprocate his benevolence by gratitude, and his condescending familiarity by true affection and sincere counsels" ! "What religion do you profess" ? asked the Amyr, "I am one of the Magi," replied he ; whereon Mámún dropped his head as if to reflect on these words, and the Persian added : "Do not despise me, O ! Amyr, because my condition is humble, and because you abhor my faith."

It is said :—Do not refute the opinions of any one ; for, whatever they are, he may be useful to you. He may be a noble or a plebeian ; if the former, you may adorn his retinue, if the latter, he can defend your life or property."

"Speaking of the humbleness of my condition to the Amyr, I meant to imply neither baseness of character nor of blood. As to my character it depends upon the Amyr to test it, when, and how he pleases ; and as to my blood, it is of the royal lineage of Persia. I wished only to inform the Amyr, that my religion may be abject according to the opinion of the Amyr, and that I live in the bonds of vassalage, and as a tributary in a state of inferiority."

"No, I entertain no aversion whatever towards you," replied Mámún, "and if you would make a profession of our religion we might employ you in an office of the State." The old man said :—"I heartily desire to comply with the wishes of the Amyr, but cannot do so now ; though afterwards I perhaps shall. If the Amyr will permit me to reason upon the argument which he had a little while ago considered with his councillors, I may perchance tell him something about it." "Speak," replied Mámún ; and the old man continued :—"I fully appreciate the advice just now imparted to the Amyr by his viziers. All endeavoured to solve the difficulty, but none of their suggestions meet with my approval." "Then, give me your own opinion," said Mámún ; and the old man continued :—"Among the maxims inherited by my fathers from their ancestors, I met with the following :—

"If a wary man encounters a difficulty which he cannot avert, he must commit his affairs with a firm trust to the Dispenser of all things, but, for all that, not abandon his own, and defend it against all comers. If, acting thus, he fails to gain the victory, he will at least escape blame."

"Old man," interrupted Mámún, "no one is fit to impart advice, unless he knows what is true. We have accorded you

our confidence without knowing by any proof that you deserve it; by thus acting we wished to disregard the injunctions of prudence, and to give you a sign of our confidence by speaking to you frankly in pledge of having favourably accepted your offer. For this reason I also inform you, that A'ly B. E'sa, the man sent against us, is more master of this country than we ourselves are. Moreover, if we desired to offer resistance, we could not do it, for want of money."

"O! Amyr," replied the old man, "you must dismiss all these ideas from your head; and not pay any attention to what has been announced to you."

It is said:—Do not go to meet him who is impelled by injustice. He will not reign who is aided by wickedness, nor he who has ascended the throne by violence.

"I shall narrate to you the story of a man, continued the Persian, which, if your case be adapted to his, may aid you to obtain the same advantage as he did."

"Relate it," said Mámún; and the old man continued as follows:

"Khoshnaváz, the king of the Hephthalites, determined to liberate Firúz, the son of Yezdegerd, and king of Persia, whom he had made prisoner, on the promise of Firúz not to wage war against him, nor to seek to offend him by fraud, and placed at the extreme limit of the Hephthalite territory a stone, which

The king of the white
Huns, and Firúz the king
of Persia.

Firúz engaged by a solemn promise not to overstep. Trusting in the conditions of peace, the king of the Hephthalites allowed Firúz to depart; but the latter had no sooner returned to the capital of his realm, than—full of shame, and disgusted with the above treaty—he determined to wage war again against Khoshnaváz. When he, however, declared his intention to his viziers, they warned him to be careful of breaking treaties, and represented to him that he would meet the fate reserved for the iniquitous, if he did so. Their words made no impression upon him, and when they reminded him of the conditions stipulated by Khoshnaváz, he replied:—"I have sworn not to overstep that stone, very well; I shall get it carried on an elephant at the head of the army; and thus not one of my soldiers will overstep it."

Seeing him ruled by his passion instead of considering the reasons advanced by his viziers, they concluded, that his intellect allowed itself to be guided by his desires; therefore, they became silent, and determined henceforth not to say any thing more to him about this affair.

It is said:—He who is too unsteady in his own intentions, will slip, and he who domineers over others, will be humbled.

Passions cover the intellect like rust, and hinder the images of verify from imprinting themselves thereon.

A passion not yet well fixed, resembles tipsiness ; but when it becomes obstinate, is complete intoxication.

A man under the impulse of passion cannot walk straight, because the paroxysm of cupidity and ire veils the intellect. This happens, because passion, like an older tyrant, holds the mind in stricter captivity than the intellect with its recently acquired dominion can do. Two veils may cover the intellect, namely, cupidity and anger. Not being obscured by these, the intellect does not fail to watch over the other passions, and also to subdue them ; but when it is thus crippled, the dominion of the passions extends, becomes absolute, and no longer meets with any obstacles.

The old man continued thus :—Firúz assembled his satraps, who were four in number, each of them commanding fifty thousand men, and ordered them to get ready for attacking the sovereign of the Hephthalites. When the preparations were completed, Firúz marched in person against Khoshraváz with so great an army, that he considered himself invincible. In reality the king of the Hephthalites had not the power to resist even one of the satraps of Firúz, and had obtained his former victory over the latter by a stratagem, which it is not necessary to relate in this place.

The Mobedan Mobed, or pontiff of the religion, who was held in great respect among the Persians, addressed the following words to Firúz, when he perceived him so intent upon waging war against Khoshraváz :—“ When kings commit errors, not aiming at the subversion of the divine law, the Lord may sometimes pass them over for a time ; but He will not allow them to be disregarded beyond bounds. Treaties must be respected ; I beseech you, O king, not to expose yourself to perdition” !

Firúz cared not for this admonition, disdained the advice of his most faithful councillors, and was bent on acting according to his own intentions.

It is said :—Five signs announce the fall of a king. Firstly, when he listens to the idle talk of those who cannot foresee the consequences of events. Secondly, when he turns against those whom he ought to esteem. Thirdly, when his income is not sufficient for the expenses of the State. Fourthly, when he takes a fancy to one man, and dismisses another without reason ; and fifthly, when he scorns the advice of men who have brains and experience.

Who cannot bear a veracious friend, gains a foe.

The old Persian continued his narrative, thus :—Now Firúz marched against Khoshraváz, till he reached the confines of his realm, where the stone was which he had sworn never to overstep. He ordered it to be removed and placed upon an elephant which

marched at the head of the army, with express orders that no one should pass beyond the elephant. He had not moved far from this place, when one of his confidants informed him, that one of the most valiant cavaliers of the army had, without any cause, slain a poor man. After a while also the brother of the man who had been killed arrived, imploring and adjuring Firúz to allow him to take blood-revenge on the slayer of his brother, and the king ordered a sum of money to be given to him as the price of blood. But he replied :—"No ; nothing can satisfy me, except the blood of the man who slew my brother ;" and as Firúz had beckoned him away from his presence, he presented himself before the murderer with a naked sword in his hand. On perceiving him, the cavalier spurred his horse, and fled.

This having been reported to Firúz, he was yet wondering at it, when one of the most farseeing of his viziers suddenly alighted from his palfrey, and knelt down before the king, who was yet on horseback. Firúz asked him what had happened, and he requested a private interview concerning an affair which he stated to be of great moment. The king, therefore, had at once a small tent pitched, dismounted, and, calling for the vizier, asked him to explain the matter.

"O ! most happy Prince," said the vizier, "may you reign over the seven climes, and live the life of Bivarasp, with the same glory and power. Henceforth the will of the Supreme Being ought to be clear to you from the example set before your eyes, when a valiant cavalier took to his heels at the sight of a beggarly fellow approaching him with a knife in his hand. What may be the cause of this flight, if not consciousness of guilt and iniquity on the part of the cavalier" ?

"No, indeed," replied the king, "he has not fled from fear of the man, but of the punishment which he knows I would inflict upon the perpetrator of so dastardly an act." "Well, then," rejoined the vizier, "I propose to you, O ! king, to recall your cavalier in order to fight with that poor fellow, giving him the assurance that he has nothing to fear from you. If the poor man conquers him, will not that appear to you as an example set to you by him who goverus the universe" ? "I shall undoubtedly do so," replied Firúz, "and, calling for the cavalier, he ordered him to fight with that man, who, as soon as he heard of it, appeared to be very glad." The bystanders tried to frighten him in vain, and said to him in vain :—"Do not you perceive his mirass, his arms, his horse ? Do you not know that he is a famous horseman, and a cavalier, most valiant in combat ? Take care how you expose yourself to sudden death !"

But the poor fellow replied :—"Let us two alone ! he rides the

charger of vanity, I that of truth ; he wears the mirass of doubt, I that of confidence ; he grasps the sword of iniquity, and I that of right."

The vizier then turned to the king and said :—"Really, the words of this man give us an example, and information more evident than even his victory in the duel could afford. Do not, therefore, in your own and in the cavalier's interest, expose him to perish in an encounter with this poor wight, who might perhaps be satisfied with compensation for the blood of his brother, or convinced by arguments of another kind to desist."

But Firúz rejoined :—"This singular duel must forsooth take place ; if this poor fellow really wishes to submit to the trial."

Accordingly the option was offered to the poor man, who, however could not be induced to retract his intention, and the hint that he would only expose himself to certain death, had no other effect than to make him more anxious for the fight.

Then the two champions approached each other. In the first moment the poor fellow caught hold of the bit of the horse, and aimed a blow at him, but he suddenly bent his head, his sword scarcely touched his back, and wounded it but slightly. Then, recovering himself he rushed against his foe, and struck him in the neck with his dirk, pulled him from the saddle, having thrown him on the ground, slew him by inflicting a mortal wound in his abdomen with such force, that some rings of the chain armour worn by the cavalier entered it with the dirk.

Firúz spent the whole night in the same place, reflecting on this event, but allowed his passion to overpower him and continued in the undertaking.

It is said :—"The beginning of the passions is easy, but the end miserable.

Passions are tyrants who slay him whom they govern. They resemble fire, which, when well kindled, cannot easily be extinguished ; they are like torrents, which, when they have become violent, cannot be arrested by any obstacles.

Call not him a prisoner who is placed in fetters by his enemy, but rather him who gives way to his own passions, and is hurled by them into the abyss.

The old man continued :—"When Khoshnaváz had heard of the enterprize of Firúz, he comforted himself, and put his trust in him who is the beginning and end of all things, imploring him to vindicate the treaties and guarantees the sacredness whereof Firúz had disregarded, and thereby had become amenable to the consequences entailed by their violation. Khoshnaváz did, however, every thing that human prudence suggested ; he strengthen-

ed the frontiers, assembled his troops, and made every preparation for war. Then he remained quiet, till the foe, having progressed far into the country, found himself nearly in the centre of it, and the subjects were greatly distressed by the devastations committed. Then Khoshnáváz marched towards Firúz, whom he surprised and put to flight in the battle which ensued ; the booty obtained on this occasion was immense, and, after a short pursuit, Firúz himself was captured and slain ; and, his family and his chief officers having likewise been made prisoners, the campaign terminated."

After Mámún had listened to the narrative of the old Persian, he was well pleased, and said :—" Your tale is agreeable, and I thank you for it. What do you reply to the invitation I now address to you of

End of the adventure
of Mámún.

making a confession of the unity of God : of him who has gifted you with intelligence, opened your mind to reflection, endowed your utterances with wisdom, and has taken away from you every pretext to ignore the revelation promulgated by Muhammad, upon whom, and upon all his family be the peace and benediction of God" ! The old man replied :—" I bear witness that there is no other God, besides Allah, and that Muhammad is his apostle "

Delighted beyond measure by this conversion, Mámún overwhelmed him with gifts, honoured him by assigning him quarters near his own, enrolled him among his favourites, and desired him to be always present at Court. A few days afterwards the old man died, but Mámún, who acted according to his advice, was prosperous, and attained the Khalifate as he had hoped.

The above narrative is corroborated by the facts revealed to us by historical works. Amyn and Mámún, sons of the famous Harún-al-Rashid, succeeded each other in the Khalifate ; the second was the first-born, but Harun designated

Historical notes to the
story of Mámún and the
old Persian.

Amyn as his successor, because he loved him more, and because he was the son of his favourite wife the noble and beautiful Zobeydah. Disregarding history and his own precedent when his brother Musa-ul-Hadi desired to deprive him of the succession to the Khalifate, Harún promulgated a solemn decree of succession, according to which Amyn, Mámún, and Mo'tamin were, one after the other, to occupy the throne. He supposed that promises, oaths, and religion would prevent strife for supremacy, and made his sons, with his generals and magistrates, swear to observe the injunctions laid down in the abovementioned document, which he himself went to deposit with great solemnity in the sanctuary of the Ka'bah. He had also made provision that, whilst Amyn reigned, his brothers

should have charge of certain provinces, with the armies and the public treasures pertaining to them.

As soon as Harún died (A. H. 193, A. D., 809), discord broke out between Amyn and Mámún. The former, desirous of ousting the latter from the succession, endeavoured to decoy him under various pretexts to Baghdád, but, as these were of no avail, he without further ado caused (A. H. 194, A. D. 809-10) the names of Mámún and Mo'tamin, designated as heirs presumptive, to be suppressed in the public prayers, took away the above-mentioned document of succession from the Ka'bah, and declared his own son Musa his heir.

In the councils of Mámún, who resided at Merv, the capital of Khorásán, various opinions prevailed; some of his friends advised him to submit, whilst others, among whom was chiefly his vizier, Fadl B. Sahl—a very sagacious Zoroastrian, who had made an outward profession of Islám—who asserted that he alone could make him Khalif, and advised him finally to throw off every vestige of allegiance after Musa had been proclaimed successor to the throne, and the agents of Mámún's private property had all been imprisoned in Baghdád. The spies of Fadl B. Sahl were, however, neither imprisoned nor discovered, but sat with the vizier of Amyu, and advised him to appoint to the expedition into Khorásán, the same A'ly B. E'sa who had governed the province during the reign of Harún-al-Rashid, and had been deposed A. H. 191 at the demand of the inhabitants themselves, for peculation and other flagrant misdemeanours. An appointment of this man to the command of the army for expelling Mámún was calculated to raise the whole country against A'ly B. E'sa, who, however, deceived by similar artifices, boasted to Amyn that he had received letters from Khorásán, in which all the mountains and seas were promised to him. Accordingly he was appointed Commander-in-Chief, and marched at the head of an army of fifty thousand men, provided with all the necessaries of war, and a large sum of money. It may here be mentioned as a curious trait of oriental benignity that the noble Zobeydah, the mother of the Khalif, and mother-in-law of Mámún, called for A'ly B. E'sa before he started for Khorásán, and recommended him, in case fortune should cause Mámún to fall into his hands, not to twist one hair of his head, and requested him, above all, never to ride in front of Mámún during the march, nor to separate him from his wives, and that in case it should become necessary to fetter him, his chains might be at least of silver.

Meanwhile Mámún, encouraged by his renegade Zoroastrian, prepared for war, with forces much inferior to those of the Khalif; he had, however, the good luck to possess two most valorous captains, Táher B. Hosayn, and Horthoma, who attacked A'ly B.

E'sa with a handful of men near Rei which was at that time a town, but is at present a village near Teherán. They performed prodigies of valour, but would probably have been overwhelmed by numbers, had not Táher, in order to recover the fortune of the day, asked for a momentary truce. This having been granted, he suspended the document in which A'ly B. E'sa had sworn to obey Harún-al-Rashid's law of succession, on the top of his lance, and advancing towards him shouted:— "Behold! you have reached the threshold of your grave." According to some authors, he then rushed against A'ly B. E'sa and killed him with his own hands, whilst others assert that he attacked only Hátin, a man who wished to defend the honour of A'ly, and split his cranium by one powerful stroke with his sword, so that the enemy was confounded by the prodigious strength of Táher, or perhaps by divine justice. This battle took place in 195, but the contest lasted for some years, as the two captains of Mámún besieged Baghdád only in 198 (A.D. 813-14), when Amyn, reduced to the last extremity and abandoned by all, was so pressed, that he fled on the River Tigris where he was slain, and his head sent to his brother in Khorásán, who then proclaimed himself Commander of the Faithful. Thus it may be seen that the above narrative is historical, and that the only fiction in it is that of the old Persian at the Court of Khorásán who makes his profession of Islám at the conclusion, and who ought to be rather the above named Zoroastrian renegade, Fadl B. Sahl, the vizier of Mámún.

The Khoshraváz of the narrative is likewise a historical personage mentioned by Mirkhond and others; he was the king of the Hephthalites, or white Húns, who had, during the first centuries of the Christian era, settled between the Oxus and the Caspian, so that their possessions were continuous with the Persian empire of the Sassanians. The valorous Bahram Gur had defeated these Húns in the beginning of the fifth century, and had driven them across the Oxus. During the second half of that century a war of succession again involved the Persians in hostilities with these barbarians. When Bahram died, and after him his son Yezdegerd II., the latter named his second son, Hormuz, his heir, to the detriment of Firúz his first-born. In order to recover the throne, Firúz demanded the aid of Khoshraváz, king of the Hephthalites, who, glad of the opportunity, placed thirty thousand men at his disposal; whereon the Persian Prince returned to his country with the barbarians, deposed his brother from the throne, and put him to death. Firúz did not think that he had purchased the supreme power at too high a price; but he found it hard to fulfil the conditions stipulated by Khoshraváz, namely, to give

him his own sister for a wife, and probably also to surrender to him the conquests of his grandfather. The first of these conditions he eluded by a gross fraud, and the second he cut short with the scimitar by a victory A.D. 464, when he marked out the frontiers according to his pleasure. Ten years afterwards, when new territorial disputes arose, or perhaps Firúz believed that he would not be king until he had exterminated his benefactor, he attacked him again with so little reason, that he pretended to defend the rights of humanity, and insisted that his only desire was to deliver the Hephthalites from the oppression of a tyrant.

Firúz invaded the territory of his foe with a powerful army, but Khoshnáváz retreated without giving him battle. A patriotic Hephthalite allowed his body to be mutilated and exposed where the army of the enemy marched, and then stated that he had been thus punished by his own king for having advised him to submit to Firúz; considering the pitiable state he was in, his statement obtained credit, and he was engaged to lead the way of the Persian army, which he, however, guided into barren mountain passes, where it was decimated by hunger, and the remnant of it surrounded by the troops of Khoshnáváz. There being no Persian who dared to reveal the truth to Firúz, Eusebins, the Roman ambassador, who happened to be in the camp, was requested to inform the king of the plight in which the army was; accordingly he narrated to him that he had dreamt of a lion being taken prisoner in the hole of a goat. Firúz was compelled to agree to the conditions of the victor; to pay a very large sum of money, and to swear never again to wage war against the Hephthalites, but the bitterest of all, to adore Khoshnáváz, that is to say, to bow down to the ground as if to kiss it. The Mobedan Mobed, or pontiff, saved, however, the dignity of the king of Persia, by causing the ceremony to be so arranged, that it should take place at sunrise, with the back of Khoshnáváz towards the east. Thus the conscience of Firúz was set at rest by making a prostration to the sun, which Khoshnáváz thought was meant for himself; so that both parties were satisfied. At the frontier of the two realms an obelisk, moved by three hundred men and fifty elephants, was set up.

Other authorities say nothing about the above mentioned patriotic Hephthalite who allowed his body to be mutilated, and merely state that Khoshnáváz retreated before the army of Firúz to a certain locality where he meant to give him battle. He had prepared ditches and masked them, and when he had attracted the foe to this locality, he halted, and, before attacking Firúz, sent a man from the ranks who bore on the point of his lance the treaty made by the two kings, calling

down the vengeance of heaven upon him who had broken it. Then the fight began; the Hephthalites fled, and the Persians, who pursued them, and knew nothing about the pits the Hephthalites had avoided, fell into them, whereon a terrible carnage ensued, in which not only Firúz perished, and what is worse, with him also the most precious pearl of the universe, which he wore in his crown, was lost. Khoshnaváz made the best use of the victory he could, by constituting it the basis of a durable peace.

The Bivarasp whose life the vizier in our narrative wishes Firúz to live, is better known in oriental traditions by the name of Deh-ák or "ten vices" which word was afterwards arabized into Zohák. This Bivarasp, or Zohák, appears to be mythical, or the personification of a dynasty, as he reigned one thousand years according to Persian traditions. From these we also learn that the realm of Erán, *i.e.*, Persia, was founded by Kaiomars, the man first created of loam, who was the king of the earth, and founder of the first Persian dynasty, called the Peshdadian, or of the first law. He endeavoured to civilize the human race, and subdued the wicked genii. Hushang, his successor, built the first town, wrote the first book, made canals for water, discovered and adored fire. Tahumars, the third king, invented the worship of idols, which were statues of men remembered by filial piety. Civilization began, however, with Jamshid, the fourth king, who made laws, divided his subjects into four castes, and laid the foundations of Persepolis. He constructed roads, caused the metals to be worked, as well as wood and silk; he accidentally discovered the properties of wine, which he had kept, and imagined to be poison. He was a naturalist, astronomer, and physician, as well as the inventor of warm-baths. During his reign, health, peace, and prosperity prevailed on the whole earth. His was the golden age, but he became proud at last, and desired to be worshipped as God by his subjects, who became discontented, whereon the Almighty chastised Jamshid, and allowed him to be cruelly slain by Zohák, a Syrian or Turanian king, who took possession of the kingdom by force.

Zohák was enterprising, and not only brave, but so ferocious, that the hot blast of his ire transmuted fountains into liquid fire, and hail into burning coals. To him the human race is indebted for the inventions of scourging, torturing, and hanging. He conquered the world, and devastated it for a thousand years. Satan, who was his friend, induced him to commit parricide and to live on animal food; and, rejoicing at his compliance, the evil one imprinted a kiss upon his shoulders, when lo! two serpents grew out of them, which tortured him so, and gave him no respite, till he applied human brains to them as a liniment. For

this purpose two men were duly slain, but, when the measure of Zohák's iniquity was full, he had a dream announcing to him his fall; whilst also his astrologers predicted that a revolution would break out as the leader of which they pointed out the prince Feridún, whom Zohák therefore wished to destroy but could not find.

Meanwhile a hero arose, Kawah or Gawah, a blacksmith of Ispahán—whose two sons had been taken away and immolated to the king's serpents—closed his forge, aroused the people, made a banner of his leather apron, under which they attacked and slew the Governor of Zohák, took possession of the arsenal, marched through the provinces, gathering strength everywhere until they arrived in the vicinity of Rei, where they intended to attack Zohák himself. Before engaging in combat, Gawah considered it proper to elect a king, and the nobles offered the crown to himself, he, however, refused and placed it upon the head of Feridún, a scion of the old royal dynasty. The tyrant was defeated and taken prisoner, whereon his head was broken by the hammer of the blacksmith. That memorable day became a festival, which was annually celebrated during eighteen hundred years till the fall of the Persian Empire and the apron of Gawah, adorned with precious stones, became the royal standard, which was destroyed when it fell into the hands of the Moslems, A. D. 636, at the battle of Qadesiah.

Zohák may perhaps be the personification of the Assyrian dynasty, which extended its conquests to Persia, and the indigenous kings before his time appear likewise to be mythical personages, representing the invention of the useful arts, the emancipation of mankind from barbarism, and their gradual advancement in civilization. As every other, so also Persian history becomes more and more certain after it emerges from the mythic period. Therefore the Kaianian, which followed after the Peshdadian, dynasty and was annihilated by Alexander the Great, 330 years before the Christian era, is somewhat more known; but, after that period great vagueness and confusion again beset the history of Persia under the sway of the Parthian, usually called Askanian, or Arsacidan, dynasty, and begin to disappear only in A. D. 202, with the reign of Ardeshir Babegan, the first sovereign of a new dynasty, namely, the last, or Sassanian, which was destroyed by the Arabs in the middle of the seventh century of our era. It appears somewhat improbable that the identical standard of Gawah had actually been preserved through the long period of time to which we have alluded above, and had been taken only in the battle of Qadesiah.

E. REHATSEK.

ART. V.—THE FINANCIAL ASPECTS OF INDIAN IRRIGATION.

CANALS (I) DIRECT RETURNS.

IN spite of Parliamentary committees and Famine commissions, there is still the widest difference of opinion as to the financial value of the great works of irrigation in India. Of their ultimate value to the country, or of their being reproductive in an indirect sense, there is hardly any doubt, their immense benefits are generally admitted; but that they yield any thing like an adequate return for the capital invested is on the other hand, pretty widely doubted.

Among the doubters are some very high authorities. The last Secretary of State declared himself a partisan of railways, as opposed to canals. Lord Northbrook did not go quite so far, but he and his advisers cut down the grant for the latter, while increasing that for the former. Sir A. Clerk very much followed suit under the late Viceroy. And the other day as great an authority on Indian finance as Mr. Lang, disparaged reproductive works generally and irrigation in particular.

The fact is that beyond the circle of Government officials very little is known about the actual financial results of these works. In the annual Public Works returns the figures for State and guaranteed railways, canals that have been working for years, and others that are only in progress or just open, are all lumped together, and it is not easy even to Indian readers to make out results clearly—it is only a few years ago that the usually well informed *Pioneer* spoke of the Gauges Canal as “financially a complete failure”—while in England the attempt is not often made. Opinion there is generally divided. On the one hand, are those who accept wild romances proposing to submerge provinces, construct thousands of miles of navigable channels, carrying millions of tons, earning lakhs of rupees, and paying percentages of three figures! On the other, irrigation works, canals made, making, and projected, are mixed up with railways, barracks, and Public Works extravagances generally, only to be sweepingly condemned.

In medio tutissimus ibis—it is proposed therefore in the following article to examine, individually and in groups, some of the leading canals. First of all purely as commercial speculations, dealing only with direct returns; their indirect value as insurances against famine, their benefits to agriculture, the substituting the more for the less valuable crops, and the increasing the prosperity and wealth of the people generally, being left for

subsequent notice. To do this, however dull reading it may be, it is necessary to deal largely with figures and to put a strain on the imagination in dealing with them. The statistics made use of are taken from the returns published by the Government of India. in most cases brought down to 1878-79.

The conditions of climate, rainfall, agriculture, land-tenure, water-supply, and the physical features of the country are in India so many and various, that the character of the works and the systems of irrigation must necessarily differ in many important respects; but they may perhaps be most usefully reviewed by division into five or six leading groups. Of these the principal would be Northern India including the Punjab and North-West Provinces, Madras, and Bengal; the smaller ones, Behar, Sind, and Bombay.

To get a true idea of the financial value of any of these large irrigation works, it is necessary to examine results extending over a long period of years. A canal, even under favourable circumstances, cannot, as a rule, be expected to yield any returns until some time after its construction, and herein differs from, and is consequently apt to be unfavourably compared with, a railway, that may begin to earn some dividend as soon as open. An irrigation canal is not unlike a great river turned upside down, beginning at the head where it is the largest with a broad wide channel, it subsequently subdivides into numerous branches which are constructed and opened first; from these again must be carried out a system of innumerable minor distributary channels getting gradually smaller till they end in the merest rill through which the water flows on to the fields. Some time must needs elapse before all these branch canals and distributary channels can be made. To press them on too fast would be neither practicable nor politic. It would raise difficulties in the labour market, and probably increase the rates for work. Their construction must also follow, not precede by very far the demand for water.

And if delays in taking the water to the people are unavoidably great, the delays in accustoming them to the use of it are even greater. Like agriculturalists all over the world, the Indian cultivators are a conservative people, averse to change, contented to risk getting their crop in the old way. Favourable rains and other causes may delay their application, and probably a bad season of drought is required to rapidly extend irrigation in a district, although, once having taken the water, the people are usually reluctant to give it up. To attempt, therefore, to judge of the probable profits of a canal that has only been open a few years, is to convey a very inaccurate idea of the value of the scheme as an investment. In many cases it is necessary to wait ten or even twenty years before irrigation will have sufficiently

developed to enable a fair measure to be taken of the returns a canal is likely to yield; and in this lies one of the strongest arguments against constructing works of the kind by the agency of private companies. No joint-stock company can afford to wait so long even for a large return, and it is cheaper for Government to carry out the works, which of necessity must have a gradually growing capital, as funds may from time to time be found available, than to guarantee but a moderate rate of interest.

This length of time before returns can be expected is a factor that must of course be taken into consideration, and in the matter of interest tells severely, but in a review of financial results canals that are under construction, or that have been only lately opened, cannot be fairly included. Still less, though it has been done in several summaries of results, can the outlay on surveys for projects be abandoned or temporarily shelved. It would be just as fair to debit the gold mines of Wynaard with the cost of prospecting in the Himályas. Such examination may fairly be a charge borne by Government in the same way as a geological survey.

The system of accounts as now adopted by the Government of India for irrigation works, may be said to show fairly enough and in ample detail their financial working. To the sums expended on actual works, tools and plant, purchase of lands, &c., is added the cost of establishment, and under recent orders, to this again paper charges representing 'capitalized value of the land-revenue abated,' 'leave and pension allowances,' and 'loss by exchange'—items, which though strictly accurate, have not been debited to all railways and other productive works—the total being called 'capital outlay,' a part of which has been provided from loan funds, and a part from 'ordinary' revenues, a distinction which for the present purpose is immaterial. So also the receipts for the sale of water, &c., are shown separately from sums received for 'owner's rates' or 'increased land-revenue,' but whatever form such receipts may take they may equally be considered as direct irrigation income, and after deducting the working expenses, as 'net revenue.' The interest charges are shown separately, calculated formerly at 5, now at $4\frac{1}{2}$ per cent. per annum on the 'capital outlay,' the accumulated interest being compared in another column with the accumulated amount of 'net revenue.'

Now it is this interest that is the *bête noire* of canals. They have in many cases, as a certain school of old Indians in former days are said to have done, started on a grand scale and got deeply in debt, so deeply that years of saving are required to get out of it. They began on a magnificent plan not only for irrigation, but with works for navigation on a scale that probably looked a century ahead, and the result is that there are many old scores to wipe off. Even a canal that has risen to so high a position as the

Ganges, and returns upwards of 7 per cent., has still a few more years to wait before its interest account will be clear.

But, while debiting with the greatest strictness this accumulated sum to works on which in former years there has been a loss, or where the net revenue has fallen short of the interest charges, it is somewhat anomalous to do so in the case of canals where for a quarter or half a century there has been nothing but accumulating profits! To make this clear, take the case of the Western Jumna canals where the net revenue has exceeded the interest charges for some 55 years, and the net profits have for the last ten years averaged £105,000 a year, while not more than £40,000 a year has been spent on new works. Under the present form of accounts interest is debited on the annual £40,000 increased capital, but no allowance is made for the £105,000 profit. It is not proposed, however, to go into compound interest. This question was duly considered by Government, and it was decided that simple interest only should be calculated. It might, however, in passing, be incidentally noted that, allowing interest on both sides of the account, on profits as against compound interest on capital, the interest account of this canal shows a plus figure of £2,288,000, which, added to the accumulated net profit to date, would show it to have yielded Government no less than £5,108,000; a sum that would wipe out compound interest on all the northern canals together! But, setting aside compound interest or any allowance on the credit side, it is surely but fair in cases of this kind to omit the charges altogether. Modified thus for works like the Eastern and Western Jumna, and the Punjab Inundation, canals, the interest account presents not only a less formidable appearance, but a really much more accurate one.

It would be clearly impossible within the limits of a single article to attempt a review of the whole field of Indian irrigation, or even to deal in detail with all the leading canals, but a few may be taken as characteristic, and a brief sketch given of their financial history. The northern group is perhaps the most suitable for the purpose, for there is now available data for judging of the working and results of the older ones from a quarter to half a century. Further, they have certainly been more costly than those of Southern India, the physical features of the country necessitating more numerous and more expensive works on the upper portions, the greater slope more costly works to counteract the excessive velocity, and the far greater number of roads, many more bridges. And though, on the other hand, the northern canals water two crops, a hot season, or *kharif*, and a cold season, or *rabi*, the water being kept at nearly the same volume throughout the year, and consequently in many cases earning double rates, it is pretty generally allowed that the

Madras works have been more remunerative in proportion to the outlay upon them. A consideration of northern canals is therefore not likely to put the case for irrigation in an unduly favourable light.

To begin with the Ganges Canal, the largest and beyond doubt the finest irrigation work ever constructed. Taken out of the holy river at the sacred city of Hardwar, it is carried for the first eighteen miles over, under, and through torrents from the lower Himalayas that are often rivers themselves, and passes over the Soláni at Rúrki by an aqueduct and approaches three miles long, a volume of water more than three times as great as the Thames at Staines, to water a district more than twice as large as the principality of Wales; its irrigating capacity about a million and a quarter of acres. Entirely a British work, a sequent of the famines that affected the Doab in 1832 and 1837, it may be said to be the pioneer of all modern canal engineering in the Bengal Presidency. That the series of noble works from Hardwar to Cawnpore have, on the whole, proved such uniform successes is due to the energy and genius of Sir Proby Cautley with whose name it will ever be associated. The expenses incident on such, as it was subsequently found necessary to remodel, was a premium paid for a matter of which Indian—or in fact other engineers, had no experience. The experience gained has been for the benefit of all subsequent irrigation works, its first cost a debit to the Ganges Canal. It was commenced in 1848, opened in 1854, and brought into operation in 1855-56, so that its published results are available for nearly a quarter of a century. The capital outlay in 1855-56 amounted to only a half of that estimated for the complete work, or $1\frac{1}{2}$ against a probable-ultimate of three millions; the total revenue collected in that year was not £2,000, the working expenses being £28,000, or a loss of £26,000. In 1859-60 not much more than a third of the distributary channels were open, but during the famine year of 1861 the acreage irrigated rose at once from 129,000 to 343,000 acres, and the gross receipts next year to £70,000. Practically, however, it was not until ten years after the canal had been open, *viz.*, until 1865-66, that any return could be shown on capital invested, but in that year it amounted to nearly 3 per cent. below which it has subsequently never fallen. Similarly the irrigated area had risen to 573,000 acres, and the yearly receipts to £125,000. This result, which under the circumstances might be considered satisfactory, was but the beginning of better things. Little more than $2\frac{1}{4}$ millions of the capital had been expended, the distributary channels were not nearly complete, and those completed were by no means fully utilized. The people were only learning the value of the water, slowly perhaps on account of good seasons. But the first really

bad season, the drought of 1868-69 gave a most decided impetus to the prosperity of the canal, the irrigated area for that year rising to upwards of a million acres, and the receipts to £245,000, a part of which could not be collected till the following year, raising the return on capital in 1870-71 to 7·4 per cent.

This, of course, was an exceptional year, and, though it could hardly be expected that such an abnormal area of irrigation could be maintained in subsequent years, it led to a marked permanent increase which has gone on gradually growing, reaching in a second decade 890,000 acres; and this year, under what can only be spoken of as the magnificent supervision of the north-west irrigation officers, the area irrigated has been close upon 1½ million acres, the receipts £328,000 of which £231,000 is net profit, being 7·33 per cent. on a capital close on 3½ millions sterling; or, adding the balance of interest to capital, an absolute profit of 5·66 per cent.

The figures given in the published abstract of accounts for these periods are as follows:—

Years.	Capital Outlay.	Revenue.	Working expenses.	Net revenue.	Percentage on Capital.	Area irrigated.
1855-56	£1,631,232	1,722	27,993	26,271	1·73	55,000
1865-66	2,271,641	125,221	75,375	49,846	2·22	573,000
1875-76	2,826,480	289,926	105,462	184,464	6·25	890,000
1878-79	3,154,127	328,073	96,804	231,269	7·33	1,209,228

The history of this canal shows that it took nearly five years before the annual receipts covered working expenses; after it had been ten years at work, putting out of sight the fact that the crops saved by it during the famine of 1860 paid for its cost more than twice over, it could only be considered remunerative in the light of an insurance against famine; while after a second ten years, though it has arrived at nothing like the results it is capable of, the direct returns yield 6½ per cent. The average percentage for the first decade was only ·61, for the second decade it amounted to 4·83, for the last three years to 6·92, and there is every reason to think a third decade may find direct returns of close upon 10 per cent.

As regards cost, the second largest entirely British work in the northern group is the Bári Doáb from the river Rávi in the Punjab, with a present capital of 1½, and a probable ultimate of two millions. It was commenced in 1850, and nominally opened in 1859-60; but, as in the case of the Ganges, it was found, when opened, that there were points of construction that would have to be considerably modified. This remodelling was not commenced

till 1870, and the canal remains still a partly developed work. The figures give :—

Year.	Capital Outlay.	Net revenue.	Percentage on Capital.	Area irrigated.
1859-60	£ 872,531	Minus. Average for	Minus. ten years.	89,787
1869-70	1,222,186	17,835	1'42	233,927
1878-79	1,496,444	Average for 43,512	nine years 3'2	327,558

This cannot be said to be satisfactory, although there is a sign of considerable improvement. The area irrigated in 1878-79, is greatly in excess of any previous year, and, had all the assessments been realized, there would have been a profit of 4'28 per cent. The canal has laboured under many disadvantages. There is no doubt the genius of Sir Proby Cautley was lacking in the original design, the cost of which was greatly under estimated, while the supply in the Ravi was over estimated; the original slope of bed was too great, and the head works have entailed a heavy expenditure.

The alterations that had to be made in both of these canals, may be said to have been almost equal to delaying their development for ten years. In both cases a good deal had to be learnt, which has been for the advantage of later works. The Agra canal, which opened only four years ago, and for which many of the distributaries are still to make, is financially now very much where these two works were after they had been open ten years. This is no doubt partly due to the careful management which has done so much for irrigation in the North-West, but the experience gained on former works has contributed a good deal, and it may therefore be fairly argued that future works will develop in a much shorter time.

The Western and Eastern Jamna canals differ in many respects from the foregoing. They are both partially founded on old works of Musalmán origin. They were not carried out on any very scientific plan, natural drainages being intercepted that have now to be provided for at considerable cost, the cultivators were left pretty much to themselves to make their own arrangements for the minor channels that distribute the water, consequently these were badly done, and the result has been swamps and other evils. They did not provide for navigation, and had none of the consequent expensive works. They were constructed in the days when compensation for land, required for the general good, was left to the village community to settle among themselves, an arrange-

ment usual under former rule, and one that did not press so hard on the Hindu village community as might be supposed. The first cost of these canals was therefore a merely nominal one, and is no guide to the outlay necessary to carry out modern irrigation canals of a similar size ; still it is quite possible to arrive at a useful comparison. Very little beyond the name of the old Moghul works existed when the British Government commenced their re-construction. The oldest and most important of the two, the Western Jumna has indeed a history going back to the fourteenth century. Firóz Shah, the best of the Tughlaks, who seems to have been one of the first rulers to recognize the want of irrigation in Upper India, carried the water from the Jumna to Hissar in 1351, by a channel that was kept going for nearly a hundred years, and which, in the middle of the sixteenth century, Akbar had dug out again, and christened by the name of his infant son ; while later still, about 1626, Ali Mardan Khan, the whilom governor of Khandahar, who seems to have been a Moghul general and State engineer by turns, brought a branch from this to the new city of Shalijehanabad, the modern Delhi ; and for more than another hundred years " the wilderness was made to bloom, and the hearts of the people made glad by the shade of the trees " on the Emperor's canal ; but at last, it, like the dynasty that founded it, fell into decay, and in 1760 had ceased to run altogether. It is doubtful whether at any time the old canal was used to much extent for irrigation ; but when in 1817 the first " Superintendent " was appointed to restore the work, little beyond a few old trees marked the sign of it. Practically, therefore, it too may be said to have been founded under our rule, its application to purposes of irrigation entirely done by us, and the extent to which this subsequently developed may be judged from the following. The Delhi branch was opened in 1820, the Háusi in 1825-26. In the next five decades, *viz.* :—

From 1825-26 to 1835-36	{ the average annual receipts amounted to }	£21,880
„ 1835-36 „ 1845-46	do. „	49,260
„ 1845-46 „ 1855-56	do. „	68,890
„ 1855-56 „ 1865-66	do. „	71,760
„ 1865-66 „ 1875-76	do „	135,970

The accumulated profits of this canal are out of all proportion to the capital invested. Adjusting the interest account as before noticed, they would pay for all the works which the British Government has constructed in the Punjab.

Of the Eastern Jumna, on a smaller scale, much the same might be said. It was opened in 1830 ; its revenue has expanded in a very similar way ; and for the last ten years it has paid an average of 26½ per cent.

It is sometimes argued, that these canals, because they were founded on the lines of old native works, ought not to be included in a financial summary of irrigation results; but there seems just as good reason for including them, seeing they were made in the first instance, especially for irrigation, as others that in addition to irrigation purposes immensely increased their cost by expensive works for navigation, that are simply at present so much deadweight—for whatever the most sanguine may expect navigation to do in the future, so far, in most cases, its returns are merely nominal. Further, these works have now been almost completely brought up to the modern standard, and the additions to capital are quite as large as if the works had been constructed in the first instance. Extensive permanent head works have been built on a scale equal to the Bári Doáb, and large sums have been, and are being spent to remedy all the evils complained of on the Western Jumna canal, which has been re-made; and, though parallel to a trunk road and a railway, to provide those navigation works without which it seems, no canal can be considered complete. They are, therefore, now eligible for promotion to the dignity of entirely British works.

These four canals take up about $\frac{1}{3}$ ths of the capital of the northern group, and the remainder must be dismissed briefly. The Inundation canals of the Punjab comprise: 1, the Lower Satlej and Chenáb; 2, the Upper Satlej; 3, the Indus; and 4, the Jhelam; of which nearly the whole of the first and portions of the second and third were constructed by native agency before the province was annexed. The principal parts of the receipts are due to increased land-revenue; it is in fact, not too much to say, that but for irrigation the land in most of these districts would yield no revenue. The four series together represent an outlay of £130,000; Nos. 1 and 4 returning, on the average of the last ten years, 173 and 17 per cent. respectively, although such percentages in comparison with other works are apt to misleading. On the other hand, Nos. 2 and 3 for the last ten years show a loss, possibly due to all the land benefited not being shown as a credit, although but for the water in the springs being brought nearer to the surface by the agency of these canals, such land would at once relapse into uncultivated waste.

The Rohilkhand and Bijnaur in the North-West Provinces, five groups of old and somewhat badly designed canals that are in a transition stage, the old lines being abandoned as new works, are brought into operation. Irrigation has consequently been of an exceptional and irregular character, and an adequate return on capital could hardly be looked for till these canals were reconstructed. Until six years ago nothing was credited for increased land-revenue, but since then the profit has shown an average of about 2 per cent.

The Dún, a series of five perennial canals that water Dera Dún, a valley of the Lower Himálayas, with a present capital of £63,000, the bulk of which expenditure has been spread over the last 20 years. Of these canals the Chief Engineer in 1868 wrote : " that no considerable profit could be looked for owing to the absorbent soil, the moist climate, and the sparse population ; but without the canals the Dún would be deserted, as the inhabitants depend on them for their drinking water." But they have become greater successes than even the more sanguine hoped, the receipts increasing considerably during the last ten years ; and with the addition of increased land-revenue the profits averaging 7·3 per cent., and having very nearly paid off all the interest account.

The Gurgaon in the Punjab, and Bundelkhand in the north-west, are small irrigation works, consisting of lakes and reservoirs, partly natural, partly artificial, dependant for their supply on local rainfall. The former have on the average yielded a fair profit ; but being made over to the civil authorities they will now be struck off the account. The latter have so far resulted in a loss. The financial results must always be doubtful, the supply being uncertain, and the area of possible irrigation for many reservoirs necessarily limited.

Summarized, the result of the above group in tabular form, is, for the last financial year, as follows :—

Years Open.	NORTHERN GROUP.	Capital Outlay.	Net revenue for 1878-79.	Accumulated Net revenue to end of 1878-79.	Accumulated charge for interest to end of 1878-79.	Difference or Accumulated Net profit to end of 1878-79.	Percentage of Net revenue on Capital for 1878-79.
21	Ganges Canal ..	£3,154,127	231,269	1,886,562	2,814,383	927,821	7·33
20	Báni Doab do. ..	1,495,441	46,886	658,241	1,264,871	606,630	3·16
53	Western Jumna do. ..	656,782	128,994	2,921,420	..	2,921,420	15·17
50	Eastern Jumna do. ..	262,949	61,940	983,579	..	983,579	24·70
25	Punjab Foundation do ...	129,979	9,774	391,225	..	391,225	7·52
32	Rohilkhand Group ..	168,823	2,331	37,316	70,150	32,834	1·45
39	Dún ditto ...	63,177	3,950	51,013	64,773	13,760	6·25
28	Gurgaon and Bundelkhand lakes and reservoirs ...	26,603	3·3	32,476	..	32,476	1·21
	Total ...	5,957,884	188,167	6,967,832	4,214,177	2,753,655	8·2
	Agra Canal opened in part March, 1871 ..	812,923	23,787	22,180	220,401	198,221	2·92

In the case of the Western and Eastern Jumna canal, &c., the

interest has been omitted, but this is altogether only a total of some £89,000. The total net revenue shows that the group together are earning 8·2 per cent.; and that the accumulated net profits are 2½ millions in excess of the charge for interest. This ought to satisfy even the most sceptical, that at any rate in Northern India, irrigation as a commercial speculation not only pays, but pays handsomely.

Regarding canals, that are under construction, no useful comparison can at present be made. Including some £70,000 contribution from Native States, Government has already spent over 4 millions upon these. The principal, the Sirhind, is to protect some 8,000 square miles between the rivers Satlej and Gagger in the Punjab; and the Lower Ganges, which is to take up the lower portion of the Ganges. Jumna Doab, are rapidly approaching completion, and promise to yield fair returns. The success of the newly opened Agra canal, already paying 3 per cent., has been previously noticed.

The Bengal group, unfortunately, presents a less satisfactory aspect. The results are published for a comparatively very short time, but financially, canals in the southern part of the province cannot, as regards direct profits, be said to be even hopeful. The conditions of climate and production are entirely different. The average rainfall is more than double that of the northern provinces. The great staple crop is rice, wheat or any of the dry weather crops being hardly known in Orissa or Lower Bengal. And for this crop in the years when the rains are favourable—that is most years—there is no demand for water. On the other hand, every now and then these rains fail, or what is much the same thing, do not fall at the right time, and the result is ruin to the rice crop, and probable famine! It is not necessarily a scarcity of rain as happened in 1876-77 in Madras, or an exceptionally late monsoon as in 1877-78 which threatened famine to a great part of India, that will bring this calamity about. The great danger to the rice is a failure of the October rains. In an unfavourable year a fortnight's dry weather may risk the loss of a large extent of crop, and this failure occurs more often than might be thought. The cultivator then becomes most anxious for canal water; and the getting of it means to him saving his harvest. But his principle is only to take the water if the rains do fail him, if they are favourable, to leave it alone; and in hope of the latter, he consequently puts off his application to the last moment, often to the great detriment of his crop, preferring even to pay an increase of 50 per cent. for water, which taken in time, would have increased the yield probably two-fold.

Now, there is abundance of proof that even in seasons of favourable rains, the use of canal water will amply repay the cultivator.

Full of the silt brought down by the great rivers, it is much more fertilizing than rain water, leaving on the fields valuable deposits that, in the almost total absence of manure, does much to lessen the exhaustion of the soil. Its use further permits agricultural operations to be commenced earlier, carried out more regularly, and with no risk. The late Chief Engineer, Colonel, now General Haig, after many experiments estimates that it would double the rice crops; and the Revenue Superintendent of Orissa reports, that it has in cases doubled the rent obtained by the middleman from the cultivator; while Mr. Harrison, the Collector of Midnapur, in his Revenue Report of 1876 shows "that its use was worth to the cultivator an extra 400 lbs. of rice and 1,000 lbs. of straw per acre," but that, "notwithstanding this, the *ryot* considered himself a loser by taking it." The explanation of this is to be found in the fact that the cultivators in these districts are mostly so impoverished, and have fallen into such a hopeless state of indebtedness, that any increase of crop is a benefit only to their creditors. On the helpless *ryots* themselves it often entails an absolute loss. Droughts, floods, cyclones, and epidemic fevers, have reduced them to poverty, and thrown them absolutely into the hands of the money-lender. There is no doubt, moreover, that British law, admirable as it may be, with all its facilities for the recovery of debt, very frequently practically operates in favour of the native money-lender, and has a tendency to bring the cultivators of the soil—a somewhat improvident class—more and more completely into his power. This is noticeable all over India, and has lately engaged the special attention of Government; but specially is it the case in the Lower Provinces, where the tenure of the land interposes between the already embarrassed *ryot* and the State, a too often extortionate middleman. Once in the hands of the *máhájun* or village banker, and the fortunes of the husbandman are soon past all hope. He borrows money at a percentage unknown to Shylock, and of property he very soon has none that has not been given in security. His crop is probably mortgaged in advance. A year of failure, and he has to buy his seed rice when it is at its very dearest, in order to repay the loan when rice has become almost a drug. But even in bad years, his creditor must leave him subsistence, in favorable years, he does not expect more than this. To quote again from Mr. Harrison "the *máhájun* takes from the *ryots*' interest at from 33 to 75 per cent., but he is satisfied with netting 15 to 20. The balance represents bad debts. Thus the *máhájun* to whom the irrigating *ryot* owes Rs. 20, recovers Rs. 15, instead of Rs. 12, because the *ryots*' land produces 29 instead of 22 bushels per acre. The Re 1-8 irrigation rate which the *ryot* has to pay Government, is therefore to him dead loss."

Further, the nature of the Permanent Settlement in Lower Bengal affects—from an irrigationist point of view—most injuriously, both the cultivator and the State. The *ryots* have no right of occupancy, and are at the mercy of the *zemindars* or the middlemen. Were they even out of debt, and by irrigation increased the productiveness of their land, they are at once subject, not only to increased rent, but frequently to more illegal exactions. The Government is also equally deprived of reaping any benefits from its investments, for instead of getting a return on the capital sunk in these large works, the lion's share of the profit is monopolized by the middleman, who under the present system of administration contributes in no way to their cost.

In Orissa, though the hands of the State are tied for some 15 years or so to come, the land-revenue was not settled in perpetuity, but under the system there known as *ryotwaree*, the cultivators are mostly under large owners or *zemindars*, and inquiries have shown them to be almost equally oppressed with their brethren in Lower Bengal. The *ryots* of Cattack when questioned, allowed the value of canal water, but declined to irrigate, because "half the profits would go to the *zemindar*, and half to the *máhájun*."

There are other causes that doubtless contribute to prevent the development of irrigation. The *ryot* is not only passively but obstructively conservative, wedded to custom, and takes long to move out of his groove. At times, owing to the state of the rivers, there might be a difficulty in affording irrigation to the cold weather crops, if these crops should be introduced to any extent. The works are yet in their infancy, a great number of distributary channels having yet to be made to develop the main canals. These, however, are but secondary reasons, the two principal may be summed up, in the indebtedness of the cultivator, and the nature of the land-tenure. So long as this remains as it is, no additional profits can be looked for from improved land-revenue.

The most important works in Bengal to which these remarks apply are, first, the Orissa scheme, including the Mahánadi, Brahmáni, and Baitaráni series, so named after the great rivers from which they draw their supply. These are connected by a channel running along the highest ground from one to the other, called the high level canal, and which it is ultimately proposed to extend to yet another series from the Subanrekha River, and on to the existing Lower Bengal series at Midnapúr, thus forming a continuous navigable channel from Calcutta to Cattack, and possibly to the Chilka Lake. The scheme originated after the terrible famine of 1866 in the undertakings of the East India

Irrigation Company, and was one of those projects that were to bring large profits to the shareholders—a result that Government has unfortunately been very far from obtaining. The best business in fact done by the Company was the sale of the works when only partially completed to the State, who thus acquired them in December 1868 at a cost of £1,173,000, the estimate to complete the project which was to command the irrigation of 1½ million acres, being then put at £2,771,000. And second, the Lower Bengal canals which as above explained, are ultimately to form part of a complete system, but at present are unconnected with the Orissa works, and being in a separate district with a different land-tenure and local peculiarities are, for administrative purposes, considered separately. They include the Midnapúr canal, which drawing its supply from the Cossye River, connects the town of Midnapúr with the River Húghly, 16 miles below Calcutta; and the Tidal canal, which hereafter is also to fit in with navigable lines from Orissa. For purposes of financial comparison these may, however, all be considered as one scheme, on which up to 1878-79 Government has spent capital amounting to £2,803,000, and is still spending about £150,000 a year. Subsequent estimates that were not recommended showed, that to carry out these works to the fullest extent would bring up their cost to about 6 millions; and a proposal for completing them on a modified scale, would increase their capital to a total of about 4 millions, but even this is not likely to be adopted for many years. Portions of these canals were opened in 1868-69, the Brahmáni and Baitaráni series not till 1875-76, but none of the series can be said to be even yet completed. As in the case of Northern India the development of distributaries must necessarily extend over many years, and large allowance must be made for the time required before it is fair to expect any direct return. The working establishment which always bears a much larger proportion to the receipts in the earlier years of a canal, is in the case of Bengal, materially increased by the fluctuating character of the demand; the revenue, small as it is, has to be collected from a vast number of little holdings, and the staff must be equal to dealing with an abnormal and simultaneous demand in the case of a failure of the rains. Another point must not be lost sight of. Included in the capital outlay, are considerable sums that have been expended on the construction of embankments to protect the country from the devastating floods; that in this part of Bengal pour down the great rivers, inundating whole districts, and are to the people perhaps even more disastrous than droughts. It may be said, that the canal system cannot be successfully carried out, unless the country be first protected from floods, still these embankments were in

themselves admitted to be indispensable, and in any case must have been undertaken by Government. Full allowance should therefore be made for the value of the protection afforded, and this might be discussed in dealing with the indirect returns. Still after every allowance is made, considered in the light of direct returns, the prospects are not good. The Bengal irrigation officers have had the greatest difficulties to contend with; affairs have seemed to improve only to retrograde again. A drought in 1873 caused more demand for water, and the irrigation of the Midnapur canal rose to upwards of 70,000 acres—an unlucky crop that was almost entirely destroyed by a cyclone, “the irrigated fields suffering most owing to the weight of the plants.” Next year it went back to 50,000, which chanced to be one of good rain, and non-irrigators congratulated themselves in growing crops without any charge, so that Colonel Haig had to report, “irrigation lower in popular estimation than ever.” But constant perseverance eventually did bring about what may prove ultimate success. The irrigated area has steadily increased. In Orissa, it has gradually risen from 23,000 in 1874-75 to 92,000 in 1878-79. Colonel Haig before finally leaving the districts for which he has done so much, is able to report a “three-fold expansion coupled with an enhancement of 50 per cent. in rates.” The introduction of a system of five years’ leases at reduced rates has been found to answer admirably, and to gradually accustom the people to take the water; in 1878-79 there is reported a still further increase in spite of good rains. The whole series as yet do not pay working expenses; but it is something to have brought down the loss from £23,000, in 1875-76, to £2,500 in 1878-79; and to enable the Lieutenant-Governor to say the financial prospects are improving yearly.

From the figures which follow, however, only one conclusion can be drawn, and it is the opinion of those who know the canals best, that there is small probability of their paying interest on capital expended any time during the present century:—

Years Open.	BENGAL GROUP.	Capital Outlay.	Net revenue for 1878-79.	Accumulated Net revenue to end of 1878-79.	Accumulated charge for interest to end of 1878-79.	Difference or accumulated Net profit to end of 1878-79.	Percentage of Net revenue on Capital for 1878-79.
9	Mahanadi series ...	£1,518,406	6,387	108,790	533,009	641,799	deficit
3	Brahmani & Baitarani ..	354,000	678	678	69,322	68,644	·19
7	Midnapur ditto ..	748,514	213	25,761	246,228	271,988	deficit
7	Tidal Canal ..	181,750	3,761	8,605	64,026	60,021	·50
	Total ..	2,802,670	2,561	125,268	917,185	1,042,453	deficit

Of the indirect value of these works there can be no doubt. Compared with the expenditure on one famine their cost is insignificant. But though they may insure whole districts against famine, save the lives of thousands, and increase the prosperity of the whole people, the present is an attempt to deal with direct returns, and if, as it seems, there is small chance of their ever paying the interest on the money borrowed for their construction, it may be asked, can they be made to do so? It has been suggested from time to time, that this might be done by an enforced cess or compulsory owner's rate, and there are many arguments in favour of the justice of the latter in some form or other, but this is a question which must be reserved for subsequent consideration.

The Sone Canal system in Behar has been so recently opened that, on the grounds previously noted, it might be left out of a financial comparison, but for its importance as an experiment in entirely fresh ground. Although belonging to Bengal it must be classed as a separate group. The climate and cultivation approach more nearly to those of the north-west, which the district adjoins. The rainfall seldom exceeds 40 to 45 inches, against the 65 to 75 of Orissa and Midnapur, and is still more uncertain, especially in the months when it is most required for rice. It is not always sufficient to ensure a good rice crop. Irrigation is also in considerable demand for the cold or dry season crops. Wheat, barley, peas, sugar-cane, are largely cultivated by water drawn from wells, and are rapidly developing where it is available by flow from irrigation channels. The district is also the principal opium producing one; and for the cultivation of opium continuous watering is a necessity. Sugar-cane cultivation which is even more lucrative, where cheap water is available, is likely to be largely substituted for the inferior crops. Already the development of this crop has been most satisfactory, 1869 showing 19,624 acres irrigated against 9,891 of the previous year, while the annual export of *jaggry* from Sháhábád by the East Indian Railway during the last three years, or since the distributary channels have been opened, has averaged 413,577 maunds against an average for the previous five years of only 46,170 maunds. The price obtainable for irrigation, *viz.*, from Rs. 2-8 to Rs. 5 per acre may be instanced as further evidence of its commercial value in Behar compared with Orissa where it is not easy to get Re. 1-8. The land-tenure is, however, the same, and nothing can be got in the form of increased land-revenue.

The project, elaborated in the greatest detail by General Dickens, shortly after the Behar famine of 1865-66, was not commenced until 1870, and though water was given in a rude way, to a great extent without charge, in 1873 and 1875, it was not formally opened till April 1877. In 1873, a year of severe drought

water was given to some 150,000 acres, and crops of the value of half a million were saved. The rains of 1875 proved almost as scanty, very little falling in September, and none in October, thus placing the rice crop in the utmost peril; but temporary arrangements again enabled water to be given to 75,000 acres. And in the November of the first year the canal was opened 1877, 200,000 acres "which would otherwise have remained waste for the year," were irrigated, all the available water being taken. "Of which," said the Lieutenant-Governor addressing a Durbar at Sonapur, "the produce represented food-grains to the value of £550,000, and of this, £400,000 would have been entirely lost had it not been for the supply of canal water." Before the work was fairly open, it may therefore be said to have indirectly paid off half its cost, and though this does not tell from the present view, it is a promise of good things to come. The series are still very incomplete as regards distributaries. The total capital outlay to date has been somewhat over 2 millions, and to complete the works, excluding possible extensions, another $\frac{1}{2}$ or $\frac{3}{4}$ million will be required, which will place beyond risk of famine an area of some 7,500 square miles. The irrigation in 1878-79 was nearly 200,000 acres, rather less than the previous year, but very far short of the capabilities of the system which is close on a million; but the returns show the satisfactory result of a small profit, for the first time, in the history of Bengal irrigation, receipts have covered working expenses, the Eastern series which is the most developed realizing a profit of close upon 1 per cent.; and had all the assessments been realized they would have been nearly $1\frac{1}{4}$ per cent. This, therefore, promises results as satisfactory as the northern group:—

Years Open.	Behar Group.	Capital Outlay.	Net revenue for 1878-79.	Accumulated Net revenue to end of 1878-79.	Accumulated charge, for interest to end of 1878-79.	Difference or accumulated Net profit to end of 1878-79.	Percentage of Net revenue on Capital for 1878-79.
2	Eastern Series	£759,894	5,732	23,491	171,076	197,568	deficit.
..	Western do.	1,386,754	12,447	4,003	27,561	279,567	90
	Total ..	2,146,648	6,715	27,494	198,637	477,135	81

Crossing over to Sind—an almost rainless province—it may be said, that without irrigation cultivation of any sort is impossible. The only way of obtaining this is by canals drawn from the Indus which flows through the middle of the province, and affords a supply of water practically unlimited. These canals of which there are some 163 having separate heads in the river, and aggregating 5,643 miles in length, are with a few exception, of native origin, and were in existence at the time of annexation; but they

have been greatly improved and extended. The only one that is a perennial canal is the Sukkur and Shahadadpur, and it works but indifferently in the cold season. The rest are all intermittent, rising and falling with the floods in the river, affording irrigation only in the inundation or rainy season, and the cultivation is therefore limited to *Kharif* crops. Of the 2 million acres irrigated probably not more than $\frac{1}{10}$ th is in the cold season. The system is somewhat rough, in seasons of low floods the water being frequently raised 5 or 6 feet by means of Persian wheels, involving an outlay on the part of the cultivators of occasionally as much as Rs. 15 per acre. In spite of this the canals are undoubtedly very remunerative, and the Government supervision required slight. The great want of the province is to substitute perennial for these intermittent canals. The *Kharif* crops are in a great measure consumed in the country by the people and their cattle. The *rabi* or cold weather crop—for which the climate and soil is as suitable as the North-West—would on the other hand, consist of the more valuable cereal grains and oil seeds. There are millions of acres suitable for wheat, and there is no reason why Sind should not become one of the great wheat-supplying countries. Having the Indus alongside, it would be free of the railway carriage that handicaps Northern India. There are no engineering difficulties, and General Strachey reporting on the subject in 1868 shows that the State might expend 6 to 10 millions with a certain return of 8 to 14 per cent.

The accounts in detail on the Government of India system have not been kept up for all these works. The financial statement for 1875-76 as laid before the last House of Commons' Committee showed the average percentage for the province to be 24·16, which is probably very near the mark. The financial results for nine canal systems as kept by the Accountant-General are, up to date, as follows:—

Years Open	Sind Group.	Capital Outlay.	Net revenue for 1878-79.	Accumulated Net revenue to end of 1878-79	Accumulated charge for interest to end of 1878-79.	Difference or accumulated Net profit to end of 1878-79.	Percentage of Net revenue on Capital for 1878-79
9	Begari Group	£115,415	3,116	116,810	50,989	65,821	2·70
	Eastern Nara do.	832,729	18,337	106,912	210,113	43,302	5·51
	Sukkur Canals	128,115	2,194	17,727	52,902	70,629	deficit
	Desert Canal	60,329	8,191	38,158	14,754	23,705	12·32
	Ghar Group	43,904	21,884	631,179	23,061	611,118	49·85
	Alibhur Kutchery do.	2,392	886	96	575	482	37·04
	Great Marak do.	17,675	4,656	16,867	4,073	12,793	16·38
	Surfraz Wahi do.	12,411	684	1,158	3,305	4,663	deficit
	Fulani do.	112,087	5,633	8,523	80,966	89,489	5·02
	Total ..	831,216	59,508	945,744	440,772	504,972	7·16

To these of course have been added all the usual paper charges, while the figures are not nearly so favourable as those given in the last Bombay report. The objection also to debiting interest to works that from annexation have been yielding returns like the Ghar group, which is quoted by General Dickens as returning 218 per cent., and admitted above as returning 50—is equally valid as in the case of the Western Jumna. But taking the least favourable view, it is satisfactory to find the average return to be 7.16 per cent. Two of these canals, the Bigari and the desert irrigate frontier districts, where owing to unsatisfactory assessment arrangements—or perhaps it is more correct to say, owing to political exigencies and the desire to induce wandering Biluchis to settle down to honest labour—a great deal of revenue is at present lost—on the first named, the assessment for some 30,000 acres in one district was only £56; and on 35,000 acres of rabi in Khilât, nil. Properly assessed, this would have brought up the net revenue for the year to £14,645. Similarly the Desert canal was subject to a loss of £7,604 from the same cause, which would have increased the percentages on these two canals to 12.69 and 23.75 respectively.

Among the nine, the Sukkur is not profitable at present, and does not seem likely to be so for some time; but nearly all the others yield very handsome returns, and, moreover, are all developing. Ten years ago, the total area irrigated was given as 1,200,000 acres; the last report gives a total of over 2 millions, of which the above nine irrigate rather over 1 million. Besides these groups in the table given, there are of course numerous others, some of which, though small and unimportant, are the most profitable, so that the average percentage will undoubtedly be very much higher than that shown.

The remaining works in the Bombay Presidency call for a very brief notice. They are few, comparatively unimportant, and with one exception, of insignificant cost. Further, there is hardly any data available for financial comparison. In the three provinces, Guzerat, Kandeish, and the Deccan, irrigation would be of great value, especially in what corresponds to the cold season of the North, when there is next to no rain, or none that can be made use of for agricultural purposes, and the natural drainages supply no permanent streams of importance. But the whole features of the country, more especially of the two last named provinces, are unfavourable for canal irrigation. The larger rivers are mostly very fluctuating—gigantic torrents in the rainy months and perfectly dry in the cold season—their beds also are generally so deep below the surface of the country, as to be in most cases impracticable for canals. Consequently the irrigation works hitherto executed have been mostly dams across the streams to form tanks or lakes,

from which small canals are taken to very moderate distances. Many of these are old, or are founded on old native works, and it is in this direction that attempts must principally be looked for to provide for the irrigation of this presidency. There is ample quantity of water if it can only be stored at the right time, to meet all possible wants.

Of the following, the first is in Guzerat, and the remainder in Kandeish; the figures which were laid before the House of Commons' Committee as the latest available, bring down the capital outlay to 1875-76, and cannot be said to be very satisfactory, the average showing a percentage of '66 only—

BOMBAY GROUP.	Capital Outlay.	Net revenue for 1875-76.	Percentage of Net revenue on Capital for 1875-76.
Hathmati Canal ...	£35,196	76	·21
Lakh do. ...	28,670	34	·11
Palkbir do. ...	13,889	127	·91
Muta Lake & Canal ..	379,935	2,514	·66
Krishna Canal ...	117,315	1,198	1·30
Total ...	575,005	3,797	·66

Of these five, the Muta Mula project ought to be excluded from a canal summary. It is a masonry dam across a small branch of the upper Godavery, in the first place, designed to supply Punah with water, and second, to irrigate by canal some lands above and below. It is only partially completed, and does but little irrigation yet. The Krishna is also a partly developed work.

The Madras group has been kept to the last, though in many respects it might be first, and is certainly one of the most important of them all. In the Madras Presidency irrigation is more common, more widely extended, more ancient, and more famous,—having a history going back to the second century before Christ—for every body seems to have considered irrigation works the right thing, not only Telingi rajahs and Naik kings, but even the dancing girls built alicuts and sported in *paddy* fields, and great English engineers have taken care that the world should hear of the fame of its modern works,—more profitable, for there is no doubt the profits have been larger, and it may be added,

there is less data for any clear review of those profits, than in any other part of India.

If the last mentioned provinces were especially unfavorable for canals, here matters are exactly reversed. Nature provided the sites to hand, and left, as it were, blanks to be filled by their construction. There are great deltas and great rivers with perennial supplies that only required to be utilized to cover thousands of acres with grain. In some cases, as for instance, that of the Krishna, she brought spurs of the Condapilly hills right up to the site of the dam, so that stone had only to be quarried and thrown in. Under the circumstances, with every natural advantage, canals in Madras have been made very cheaply and have undoubtedly realized splendid returns. The amount of those returns is, in the absence of accurate data, somewhat speculative. The Government seems to have followed very much the old native practice of making no distinction between land-revenue and water-rate, payment being taken in a lump sum. Up to a recent period irrigation returns in that presidency showed—like Sir Arthur Cotton's speeches—a sublime disregard for details. Charges for maintenance, management, establishment, were partly or wholly omitted. The entire increase of land-revenue from all sources was assumed as profit, but the cost of collecting it ignored. Sums that in Bengal would be debited to loan funds were charged off as 'provincial,' and so do not appear in irrigation accounts at all. Even now, several of the before noted paper charges are omitted, and the interest account is left out. But canals that pay 85 per cent. and go back to before Christ, may be fairly excused an interest column. It is therefore difficult to obtain accurate figures as to the exact cost or profit of any work and the table given below is very incomplete.

The whole capital outlay expended on canals, tanks, and water works, does not, however, amount to nearly as much as the cost of the Ganges Canal or the Orissa scheme, being under 2 millions, £1,200,000 of which has been spent on the Godavery and Krishna systems, both entirely British. These with the Cauvery, are the three largest, and with the Pennar and one or two smaller ones irrigate the principal deltas along the Coromandel Coast.

The Cauvery system is the oldest of the three, and dates back as a restoration to 1834, after a famine had as usual called attention to the want of it, though it originated in a series of native works made under the Telingi rajahs. The anicut at Seringham was irrigating about 600,000 acres when Tanjor was ceded to the British. Irrigation has subsequently been developed almost to the fullest possible extent, Tanjor being now known as the Indian Lombardy. The area watered according to the last available returns amounted to 835,000 acres, and the profits to 85 per cent.

The Godavery works consist of a long low dam thrown across the river at Dauleshwarum, where it is some 6,000 yards wide, or measured along the dam including islands, 5 miles. It was commenced in 1847, and the subsidiary works opened in 1851. Since then it has developed to a splendid and still increasing extent, the return for 1875 showing some 600,000 acres under irrigation, 90ths of which was rice. Not only this, and the Cauvery remodelling, but a large proportion of the works in Madras owe their origin to the genius and enterprise of Sir Arthur Cotton, the Nestor of irrigation.

Adjoining the Godavery, and connected with it by a high level canal, is the Krishna system which, commenced in 1852, is in a less forward state of development, but irrigates some 250,000 acres, and is financially almost as successful.

These two systems have, in addition, provided a district almost destitute of roads with a series of the most magnificent navigable highways.

The others are small works, of a similar character, excepting the Strivigantūm which is a series of anicuts or wiers across the river Tamhapurin in Tinnevely; in part very old native works which supply numbers of tanks, the lower anicut only being British work.

The tank works of Madras, which are more numerous than in any other part of India, must be omitted; and the following are the returns for canals as laid before the Commons' Committee.

Years open.	Madras Group.	Figures for	Capital Outlay.	Net revenue for year.	Percentage.
17	Godavery	1875-76	£736,444	127,491	17·3
13	Krishna	1875-76	463,590	66,491	11·3
45	Cauvery	1873-74	1,53,964	114,951	85·8
	Total	1,333,998	308,933	23·15
24	Pennar	1875-76	134,020	?	
	Vellore	1875-76	25,300	?	
	Falar	1872-73	108,371	1,090	1·0
	Strivigantūm	1874-75	106,060	3,878	3·65
	£		1,707,740	?	?

General Strachey after examining Madras accounts estimated the returns of the Godavery in 1864-65 as 22½, in 1865-66 as 28½, and the Inspector-General in 1870-71 as 33½ per cent. The Madras Government claim, that in 1872-73 the work had repaid its total cost three times over. The figures above for the three great works show a return of 23·15 per cent. on the £1,334,000 of capital outlay. And though, in the absence of exact returns it is unsatisfactory

to attempt to estimate, it may probably be safe to say, that were the figures available for the entire Madras works, it would be found the net profits have long ago paid off all the capital expended and interest charges, leaving the State with a handsome and yearly increasing sum in hand.

This article has already extended to such great length, that any further remarks on the general question must be deferred, and the reader who is no doubt weary of the word 'irrigation,' and all figures and statistics in connection with it, shall only be asked to look at one more table in which the results of the foregoing groups are brought together:—

Groups.	Capital Outlay.	Net revenue for 1878-79.	Accumulated Net revenue to end of 1878-79.	Accumulated charge for interest to end of 1878-79.	Difference or accumulated Net profit to end of 1878-79.	Percentage of Net revenue on Capital for 1878-79.
Northern Group	£5,967,884	488,467	6,967,832	4,214,177	2,753,655	8.2
Bengal „	2,802,670	2,561	125,268	917,185	1,042,452	deficit
Sind (in part)	831,246	59,508	945,744	440,772	504,972	7.16
Bombay, 1875-76	575,005	3,797	?	?	?	.66
Madras (in part) '75-76	1,333,998	308,933	?	?	?	25.15
Total ...	11,500,803	860,705	7,913,576	5,572,134	2,216,174	7.46
Canals recently open						
1874, Agra Canal	23,787	812,823	22,180	220,401	198,221	2.92
1877, Behar Group	6,715	2,146,648	27,494	450,640	477,135	.31

The Agra and Sone canals (Behar Group) being so recently opened are shown separately, the remaining five are tolerably complete. There may possibly be half a million more capital in Sind, and about the same amount in Madras, but in both cases the returns would be more favourable than the average shown. It will be seen that the accumulated net revenue exceeds the total interest charge by about $2\frac{1}{2}$ millions, and this does not include Madras, which would probably more than double it, so there is at least some 4 or 5 millions balance of profit to stand against the interest of the works just open, or shortly to be so.

In round numbers the capital outlay upon the five groups of canals has been nearly 12 millions sterling, and upon this the last accounts—which have passed through the fire of the Audit Office—show a clear return of $7\frac{1}{2}$ per cent.

Considered therefore merely as a commercial speculation, for a Government that can borrow money at less than $4\frac{1}{2}$ per cent., the figures may be left to speak for themselves.

E. E. OLIVER.

ART. VI.—NOTES ON EARLY COMMERCE IN BENGAL.

INDIA was known to Europe from the earliest times. The Greeks traded with Bengal; the Syrians carried the manufactures of India through the Gulf of Persia; the Egyptians carried them to Europe by the Red Sea. Subsequently the Romans had the trade of India brought to Constantinople. Not being satisfied with the goods they got *viâ* Egypt and Syria, they opened another route, *viâ* Palmyra, from the Euphrates to the Mediterranean. After the Romans, the Venetians had the commerce of Asia. In 883 India attracted the attention of England. Alfred the Great, having heard of the wealth of India, despatched several ships, which, however, coming to the ports of Syria and Egypt, returned thence laden with Indian commodities. Up to the time of Henry VIII., no other monarch who sat on the throne of England thought of India. The Indian articles which the English nobility required, were sugar, spices, aromatics, silks and cotton stuffs, which were supplied by the Venetians and Florentines. After the discovery of the passage round the Cape, Indian trade passed into the hands of the Portuguese, and the English imported Indian commodities from Lisbon. The first Englishman who came to India in a Portuguese ship, was named Captain Stevens; and the account which he published, as well as the descriptions of other mariners, opened the eyes of the English nation to India as the land of "barbaric pearl and gold." India became the great subject of conversation. The bard of Avon, in the *Merry Wives of Windsor*, says:—

"They shall be my East and West Indies, and I will trade to them both."

The Portuguese had taken the start. In 1537 they came to Bengal, where Hooghly was their first, and Chittagong their second, settlement. The Portuguese were followed by the Spanish and Dutch, who, in 1625, spread themselves in different parts of Bengal. The Armenians possessed considerable settlements, especially in Sydadabad. In the meantime the love of adventure and mercantile enterprise was being developed in England; and in 1600 a Company was formed in London, called the "Governor and Company of Merchants of London trading to the East Indies." The English Company found that they had many difficulties to contend against. They wanted to build a factory at Hooghly, but, apprehending opposition from the Portuguese, they settled at Pipley in Balasore.

114 *Notes on Early Commerce in Bengal.*

Under the Mahomedan administration the seat of Government in Bengal was changed from time to time. At one time it was Nuddya, then Gour, or Lucknowite, or the Gangia Regia of Ptolemy, or Jenuntiabad, then Panda, near Maldah, Tanda near the site of Gour, Dacca, Rajmahal, or Akbarnagore, and afterwards Murshedabad. Under Akbar Bengal yielded the largest revenue with the exception of Delhi and Berar. Fitch went to Akbar with letters from Elizabeth. Sir Thomas Roe went from James the I.

Sir Thomas Roe says :—

“ Port *Peguenho* in Bengala, you are misinformed in, there is no mart or resort of merchants ; it is traded to by the Portuguese from Pegu with rubies, topazes and sapphires, and returns clothes which are fine.” He calls Bengala “a mighty kingdom.” Its chief cities are Rajmahal and Dacca—*Peguenho* is the port resorted to by the Portuguese.

In 1636 Bruton having secured privileges for the English Company, factories were built at Balasore and Hooghly. They engaged in the construction of ships and commenced their mercantile career which was attended with profit. But, the civil war having broken out in England, Indian commerce was affected. Cromwell, however (1652-57), renewed the Company's charter. Milton, who was then the Secretary to Cromwell, wrote—

As when afar at sea a fleet descried
Hangs in the clouds, by equinoctial gales,
Close sailing from Bengala,

Again—

The wealth of Ormus and of Ind, or where the gorgeous East with
richest hand
Showers on her kings barbaric pearl and gold.

Until 1790 the avowed principle of the Company was first commerce, second, revenue, and third, justice. The Company had servants called residents, senior merchants, junior merchants, factors and sub-factors. They managed their business by advances, and employed agents for the purpose. The servants of the Company, from the highest to the lowest, were privately engaged in the trade. They were successful, and their success “produced new adventures, and besides a number of English merchants licensed by the Company, Calcutta was in a short time peopled by Portuguese, Armenian, Mogul and Hindu merchants, who carried on their commerce under the protection of the English flag.” Such was the state of things in 1717.

Bruton, who had visited Bengal in 1632, says the city of Bengal was “very great and populous. It has many merchants in it, and yieldeth very rich commodities.”

How Calcutta and its divisions were acquired, how it was captured, how the horrors of the Black Hole were enacted, and how Calcutta was re-taken by the English are too well-known to require recapitulation. In 1737 there were "opulent merchants, gold plentiful, labor cheap, and not one indigent European in all India." In 1756, Calcutta was taken by Surajadowla. In 1757 it was re-taken by Clive and Watson. In 1770 Bengal was visited with a dreadful pestilence from which one-third of the peasantry are said to have died, the rich families were reduced to indigence, and one-third of Bengal became "a jungle inhabited by wild beasts." But there was great elasticity in the resources of the country. In 1784 the *Gentleman's Magazine* says:—"There is no branch of European commerce that has made so rapid progress as that to the East Indies." In 1756-57 the exports and imports of the Company were doubled in value and quantity, and in 1791 Calcutta was in a flourishing state.

Various coins were current in the country, viz., cowries, copper coins, lumps of copper, pieces of iron beaten up with brass, thirty-two kinds of rupees, pagodas of different weights, dollars, gold mohurs, &c. The increase in trade exceeded the coin in circulation. Gold, silver, copper and notes had been introduced; but as offences against the currency were numerous, there was no certainty as to its value. The Mussulmans had silver as a circulating medium.

In 1685 the East India Company began to coin their own money; but it was found necessary to recall the old currency, and issue one of fixed weight and purity. The delay in the issue of the new currency was so great, that buying and selling were at a standstill. The Government encouraged gold currency which depreciated silver, till its exportation to Madras, Bombay, and China became so large that its scarcity began to be felt in Bengal.

It is true that Bengal had received large quantities of silver from the Romans, Venetians, Portuguese, Dutch and English in exchange for the goods sold to them. But from 1765, the Company began to apply the surplus revenues of Bengal to the purchase of investments. £60,000 could be invested in silks and cotton manufactures. The gold currency introduced did no good. In 1769, "every merchant in Calcutta was in danger of becoming bankrupt or running a risk of ruin by attachment on his goods." From one end of the city to the other, there was general consternation. The English and Armenian merchants petitioned Governor Verelst who, after due deliberation, ordered a second gold coinage, taking care not to repeat the mistake of 1766, but this did not cure the disease. Silver was depreciated and withdrawn from circulation. The confidence in the Government was shaken, and

business continued in this unsatisfactory state for some time. This led to the reforms in the Mint. It was ordered that all future issues should bear one date of 1773. In 1790-91 new mints were established at Dacca, Moorshedabad and Patna which began to issue new milled rupees. In 1794 the new coinage was declared to be the legal tender which displaced the defaced rupees.

The Company had a saltpetre factory at Patna. The Sultan of Turkey requested Arungzebe to forbid his subjects to sell saltpetre to the Christians. Another annoyance to which the Company was subjected was from Murshed Kuli Khan, who, while he gave every encouragement to the Mogals and Armenians, worried the English by demanding from them duties and presents.

Mr. Mun (a Director of the Company,) published a tract (reprinted in *Purchase's Pilgrims*) that from the commencement of the Company's trade to July 1620, seventy-nine ships had been sent; the exports had amounted to £840,376 and the imports from India, costing £356,288, had produced £1,914,600. The Company met with serious losses in consequence of accidents to their shipping and quarrels with the Dutch; but, notwithstanding, they continued to extend their territories. In 1658 Madras was made a Presidency. The factories established in Bengal were for a long time subordinate to Madras. In 1687 the seat of Government was removed from Surat to Bombay.

In 1664 the French East India Company was formed. In 1677 the charter of the English Company was renewed. India excited the greed of the mercantile classes in England, and from the reign of Charles II. the number of private adventurers and interlopers began to increase. The cry was for free trade, and another Company was formed which was eventually amalgamated with the East India Company, under the name of the United Company of Merchants of England trading to the East Indies.

In 1692 the seat of Government was transferred from Hooghly to Calcutta. When Fort William was built, the Hindus seem to have looked upon it as a place of refuge, and the Setts, Gobardhan Mittra, Nubkissen, and other families settled there. Some of them had to remove from Sutanote when the fort was built.

Competition in those days was looked upon with hostility; and when the Ostend Company (a German Company) was formed, the Dutch and English, who had hitherto hated each other, became friends and began to annoy the German Company, who had their office in Baughbazar. The average annual exports of the East India Company from England for the ten years ending with 1727 were £92,410 126, and those of bullion £518,102.

In the reign of Charles II we meet with the first notice of tea in the records of the East India Company; and the first order for

100 lbs. was sent in 1667-78. The consumption of tea in England gradually increased ; and during the three years ending with 1773, the operations of the Company could not have been continued but for this circumstance.

The articles to which the attention of the Company had been chiefly directed were raw silk, cotton and indigo, the country to the east of the Padma being selected for the silk trade. The Company had constant bickerings with rival traders and private adventurers, as they began to monopolize all manufacturers and workmen, and established a monopoly of salt, betelnut and tobacco. Down to 1786 they carried on the trade by means of advances, and their agents, through whom the advances were made, were treated with the highest respect. In 1768 the Governor and Council of Calcutta passed an order prohibiting Company's servants as well as Armenians and Portuguese from carrying on any trade in Bengal. Verelst on the 16th December 1769 minutes:—"We looked no further than the Company's investments. We sought advantage to our trade with the ingenuity, I may add, selfishness of merchants."

The importation of calicoes by the East India Company between 1780 and 1790 so alarmed the English calico printers, that they petitioned Parliament to prevent the emigration of artists to India and prohibit the exportation of plates, block, &c.

Hamilton, in 1720, describes Calcutta as "a market town for cora, coarse cloth, butter, oil, with other productions of the country." Moorshedabad was then "the greatest place of trade and commerce on the Ganges." In Baranagore and Chinsura the Dutch had settlements; in Cossimbazar and Malda the Dutch and English had factories, while in Hooghly the Danes, and Portuguese had factories. From 1750 to 1756 Calcutta was the head factory of the East India Company, the subordinate factories being at Dacca, Cossimbazar, and Patna.

Prior to 1758 the Company procured piece goods and other articles through native merchants by contracts. Omichand was their agent for forty years and became immensely rich. In 1753 they abandoned this system and employed Gomastas to buy at the different *arrungs*. When they obtained the privilege of trading duty free, boats were sent to the different places with their flags and *dustuks*. The Company's servants engaged in trade on their own account; and the Company had therefore to give an engagement that they would not unfairly avail themselves of the order as to the Company's goods being carried duty free.

During the early administration of the East India Company, grain was exported from some districts and paid for by salt from

others. The grain districts mentioned by Holwell are Bowan-gunge, Sahebgunge, Surupgunge, and Jamalgunge. Dinagepoor and Backergunge the great grain districts of the present day, were then apparently unknown. Tobacco was exchanged for betelnut sugar, &c. Cotton was exported from some districts. The articles required by the East India Company were piece goods, silk, saltpetre, opium, sugar, indigo.

Plain muslins, as well as flowered, striped, or chequered, were fabricated in Dacca, while other kinds were manufactured on the western side of the Gangetic Delta; and coarse muslins were made in almost every district. In Moorshedabad silk was manufactured for local consumption and export. In Malda, Bhagulpore, and Burdwan mixed goods, composed of silk and cotton, were made. Mirzapoor was the mart for filature silk, and tusser was made in countries bordering on Bengal, as well as within its limits. Saltpetre was manufactured within the eastern limits of Behar. The annual investments of the Company in 1792 averaged 37,913 cwt; and for the four years ending in 1779 those of piece goods were Rs. 49,32,382. In 1801 the government advances to Dacca were 25 lakhs. In 1812 the amount was reduced to two lakhs. In 1817 the commercial residency was abolished. In 1828 the Court of Directors wrote to the Government announcing their determination to abandon the trade, as, through the intervention of power looms, the British piece goods were better in quality and cheaper in price. The cause of the ruin of the Indian cotton manufactures was that, while they were subjected to a duty of 10 per cent, English piece goods were admitted at 3½ per cent. In 1829 Lord William Bentinck says:—"Cotton piece goods, for so many years ago the staple manufacture of India, seem thus for ever lost." The export of Dacca muslins commenced in the seventeenth century, and in 1783 the trade of Dacca was reckoned at 1½ million sterling. The whole commerce of Bengal was estimated at 6½ crores, viz., articles of necessity at 3½ crores; second, articles of requirement at one crore and 20 lakhs, and articles of luxury at 3 crores and 3 lakhs. The total gross produce was valued at 24 crores, and the agricultural expenditure at 1½ crore. The capital employed in cotton was 12 lakhs and that in silk 10 lakhs.

The Custom House in Calcutta was established before 1781, the officer in charge of it being called the Customs' Master. He was subject to the Board of three Commissioners. The duty levied was 4 per cent. on most articles, imports and exports.

In 1771 silk was first sent to England and was much admired. In 1755, the Court sent an order for 50,000 lbs, of Baroch

and Surat cotton, which could not be executed. The cultivation of cotton from superior seed was carried on in different parts of the country, and directions were given for cleaning and packing it. As regards indigo, arrangements were made from 1779-80 for obtaining supplies from private individuals. In 1791 Lieutenant John Paterson brought sugar to the notice of the authorities in England; and, while they were considering what steps they should take, a shipment of 5 tons, in execution of an order, arrived, which realized 92s. per cwt. In 1792 the demand for sugar increased owing to the cheapness of tea, and from that time it began to receive attention here. The Bengal Board of Trade took up the matter in right earnest. Cane sugar was largely grown up the country and in Lower Bengal, while date sugar was manufactured in Lower Bengal and was only mentioned in the Report of the Collector of Santipore. Being cheaper, it was encouraged, the Board writing:—"Should it answer for exportation, the cheapness of this sugar compared, with the cane sugar, will bring it in much demand." The quantity of land on which sugar was grown in 1792 was 1,59,732 biggahs, of 1600 square yards, which gave 1,14,525 maunds sugar. From 1791 to 1814 the sugar exported yielded no profit, because it had to pay an average freight of 31s. 6d. per ton. Bengal sugar labored under great disadvantages; but in December 1836 Act XXXII. was passed, to allow it to be exported at a lower duty, which was followed by increased export. For some years Khaur was shipped; but after the passing of Act of 1845, admitting foreign sugars to competition, it was abandoned, and the sugars which were shipped were Benares kinds, good date, refined, or vacuum pan sugar. The Company, as well as private individuals, made shipments of tobacco, but it did not pay, the quality being inferior and it being dearer than American tobacco.

Mr. Joseph Willis was the first who shipped jute to England under the name of *Khosta*.

In 1795 indulgence was granted to Indian built ships to trade to England. Ship-building commenced here from early times. Warren Hastings and his lady were present at the launch of the first vessel built at Kidderpore, where several ships were built. In 1801 a few ships were built at Tittaghur, and from 1811 to 1828, 27 ships were built at Fort Gloster.

The number of ships built from 1781 to 1879 was upwards of 376, the years when ships were most largely built being 1801, 1813 and 1816. The Company took the initiative in building docks, and were followed by others. In 1803 private traders were allowed to export foreign goods to an extent so limited as not to interfere with the Company's interests. It appears that the rates of

freight were settled by the Court of Directors, who in their general letter dated 23rd December 1805 wrote:—"you are to charge at the rate of £30-10 per ton for all goods laden on the regular ships of the season of 1807-8."

In 1773 only 160 ships, of 44,497 tons burthen, entered the port. From 1783 to 1791 there was a decided increase in the arrivals and departures. Parliament permitted private trade by an Act of 1793 which was enlarged in 1802. In the reports of the Select Committee of the House of Lords, 1820-21, it is stated—"Of the practicability of enlarging the imports into this country, of Indian productions fit for the European market, it was formerly stated by the Court, that the diligence not only of the different East India Companies of Europe, but of individual Europeans trading through the whole extent of the Indian seas, has been excited during three centuries to discover articles which might be profitably exported to Europe; and after all the experience thus acquired, particularly in the present day when the coasting and internal trade of India has been greatly enlarged, it is not reasonable to assume, upon merely theoretical ideas, that there is any source of materials, raw or manufactured in India, yet undiscovered, by which the imports from India into this country can be profitably augmented; and with respect to those articles which may now be considered as the staples of India; namely, cotton piece goods, raw silk, indigo, raw cotton, and sugar; the demand for the first is reduced and limited by the vast growth and excellence of the cotton manufactures of Britain and Europe; the second, to whatever extent demanded, can be brought home in the ships of the Company; the third, already imported to an extent that nearly supplies the consumption of Europe, may also easily be carried in the same channel; and the article raw cotton, brought from a great distance at a high freight, which renders it incapable of entering into competition with the cottons of Georgia and Brazil." As to sugar, the Committee thought it could not compete with the West Indian sugar, and with regard to hemp, that it could not stand competition with the Russian hemp.

We have Mr. T. Brown's reports on the External Committee of Bengal from 1795-6 to 1802-3. In 1795-6 the exports to London consisted of indigo and piece goods on private and Company's accounts and were worth 15 lakhs. The exports of piece goods to Hamburgh were more than 13 lakhs. Those to Copenhagen consisted of sugar and piece goods, and to Lisbon the export of piece goods was "very considerable." To America the export of manufactured cotton goods had been increasing since 1792. From America they were reshipped to France.

In 1796-7 the export trade was double of what it was in 1787.

Indigo was unknown in England. In 1795-6 the quantity shipped was 4,000,000 lbs. There was an increase in the manufacture and supply of piece goods, and owing to the demand for export trade and tanneries, lately established in the town, the price of raw hides rose considerably. Two new articles of export were introduced, *viz.*, cochineal and lapis lazuli. Muslins and calicoes were exported to London, Hamburg, Copenhagen and Lisbon by private merchants. Supercargoes could buy bills from English merchants on their Bengal agents against the cargoes shipped by them. The trade of America with India was increasing. The net profit of a ship was 60 per cent. if she brought dollars in 15 months.

In June 1795 the Inland Import duty was changed into an export duty. In 1797-80 the new articles of export were elephants tusks and oil of nutmegs. Private merchants erected a dry dock opposite the town of Calcutta at a cost of Rs. 120,000.

In this year, there were in the town 4,300 houses of British subjects, 640 of Armenians, of Portuguese and other Christians 2,650, of Hindus 56,460, of Mussulmans 14,700, and of Chinese 10.

In 1798-99 several of the Indigo planters failed, and the export of Indigo fell off. It was discovered that the average loss on piece goods to London exceeded 15 per cent. Private exports to London in 1796-99 were £800,000.

Previous to 1798-9 a large proportion of the import trade was carried on in Genoese, American and Danish ships. In the latter year permission was granted to private merchants to load their own ships, which led to the export of new articles, *viz.*, ginger, turmeric, &c., which could not be shipped before at the high rate of freight prevailing. To this cause is also to be attributed the import of several new articles, pepper, camphor, rhubarb, coffee, &c., into Bengal.

In 1800 the value of the exports by British subjects, Americans, Portuguese, Danes and other foreigners, Armenians and Natives of India was £3,500,000.

The American merchants employed Banians to transact their business. The trade of Manilla was in the hands of the Armenians, who had intercourse with the Dutch and the Island of Java, whence opium and other articles were obtained which told on the commerce of Bengal. Mr. Brown adds that "the lands are also better cultivated, as notwithstanding the increased export of grain from 30 to 45,000 tons in private trade, and the large tracts of country required for the growth of sugar, indigo, and other articles exported by sea, the price of rice and every kind of food used by the natives, so far from being enhanced, has been considerably lower on the average of the last ten years."

In 1801-2 the imports of piece goods and raw silk into Calcutta increased to one crore and twenty lakhs of rupees. In 1802-3, the natives were roused to invest their money in various manufactures and productions which they bought at every *arung*. They thus displaced the European merchants, being content with 10 per cent. profit. One effect of this native movement was that ships which had to wait until the goods were bought at the *arungs*, were loaded at once. The petty dealers followed the opulent merchants and preferred ready sales.

The capital of the native merchants was estimated at sixteen millions of sterling. Mr. Brown states, "that the formerly timid Hindu now lends money at respondentia on distant voyages, engages in speculations to various parts of the world, and as an underwriter in the different insurance offices, erects indigo works in various parts of Bengal, and is just as well acquainted with the principles of British laws, respecting commerce, as the generality of European merchants, and enjoys, moreover, two advantages over the latter : the first in trading on his own instead of a borrowed capital ; and, secondly, of living and conducting his business at probably Re. 1-10 of the expense of the European."

The export trade in 1797-8 was eight hundred thousand pounds sterling, but in 1802-3, although it was an unfavorable season, it was one million five hundred thousand pounds sterling. In 1797-8 the net amount of duties collected was £140,817, but in 1802-3, when the duties were again put on, the net collections rose to £407,528.

We come now to Mr. Larkin's Reports on the External Commerce of Bengal from 1803-4 to 1812.

In 1803-4 the trade of Bengal declined in consequence of the war between France and England. The export of piece goods during the past two years had been heavy, and the demand for them in Calcutta was slack. But the Oude cloths were eagerly sought for. The export of sugar and saltpetre fell off ; but that of indigo and raw silk increased. Silk was better prepared than in early days, and was reeled direct from the cocoons. The export was valued at Rs. 6,61,394. The average trade of America with Calcutta during these eight years was Rs. 39,65,450.

In 1804-5, there was a decline in imports and exports. Tory and Jones established here a manufactory for making canvas—which met with the approval of H.M.'s Navy. In 1806-7 grain was largely shipped to avert a famine apprehended in China, &c. In consequence of the war in Europe there was an interruption in the intercourse with Copenhagen and Lisbon. In 1807-8, there was a great falling off in the imports and exports from and to America, and there was also a decrease in the trade with London.

The outturn of indigo was, however, larger, fresh factories having been established by Natives and Europeans. The piece goods market was much depressed. In 1808-9, there was a falling off in both exports and imports owing to the cessation of intercourse with Copenhagen and Lisbon, there was at the same time renewal of intercourse between Manilla and Bengal, which gave a spurt to the piece goods market. 1809-10 great loss was suffered on cotton shipments in private ships to London owing to the re-establishment of friendly relations with America. From Calcutta 40,781 bales of 300 pounds were shipped. Several Indian built ships were sold at this time in London.

1810-11 was marked by an increase in imports and a decrease in exports. Silk was not manufactured owing to failure of *bunds*, and it was not thought prudent to meddle in cotton. No intercourse took place with Lisbon, the Portuguese trade being confined to the Brazils. There was an increase in the trade with the Gulf.

From Bengal, China received opium, cotton and piece goods. The exports showed an increase, and there are notices of an intercourse with the Isle of France, or Mauritius. The imports were coffee, and the exports grain, opium, salt provisions and other articles of consumption.

Mauritius about this time became a British colony.

When Adam Smith wrote the *Wealth of Nations*, the great principles which he advocated were not generally appreciated; but his work gave rise to thought in many minds and resulted in the gradual acceptance of his doctrines. When the Charter of the East India had to be renewed, the contention was that the monopoly should be done away with, and the trade of India thrown open. Those who raised this contention were successful, and from 1813 the trade was opened to the European public. The result was a great increase of both exports and imports. Cotton and indigo especially met with ready sale. In 1813-14 the imports amounted to two crores and twelve lakhs. In 1818-19 they had reached seven crores and sixty-two lakhs, exceeding the exports by fifty-two lakhs, which was not the case before. New articles of import were added, *viz.*, piece goods, cotton, cotton yarn, thread, sherry, and spelter which were unknown in 1813-14. But while the European imports increased, the Asiatic imports decreased.

The exports rose with the imports till 1818-19, when they declined again for two years. From 1813-14 to 1827-28 there was an increase in the value of imports and of 20 per cent. in that of exports.

The Bank of Bengal was established by an order of the Court of Directors, dated 24th September 1808. Originally it was the

124 *Notes on Early Commerce in Bengal.*

Bank of Calcutta, opened on the 1st May 1808, and on the 2nd January 1809, it was called the Bank of Bengal.

The Bank of Hindustan was established by Alexander & Co, about 1770. It was a bank of issue. In 1819 the Commercial Bank was established by certain members of Fergusson & Co., and Gopeemohun Tagore. It was also a bank of issue. It was subsequently wound up, and Dwarkanath Tagore paid all the claims. The Calcutta Bank was established by Palmer & Co. The Union Bank was established in 1829. It made advances on indigo. It also bought commercial bills on London, selling here its own bills on the Banker to whom the commercial bills were remitted for realization. But we had no regular Bank of Exchange till the Oriental Bank was established.

The establishment of a number of European houses opened a large field of employment to intelligent natives. It also gave an impetus to English education. The system of banianship had been inaugurated almost from the commencement of the Company's mercantile career. Omichand acted as their banian. Our readers will have noticed that the American houses employed banians in early times, and the system was continued. One of the oldest banians was Ramdulal Dey. In former times, the banian took no risk in making sales and purchases, but only charged *dustoorree*, or commission, at a certain rate. Calcutta was full of money, and those who had money preferred to lend it to agency houses, as they paid higher interest than Government securities.

In 1830-32 the following houses failed :—

	<i>Liabilities.</i>	<i>Dividends.</i>
Palmer and Co., ...	280 lakhs.	30 per cent.
Cruttenden, Mackillop & Co.	120 "	26 "
Alexander and Co. ...	400 "	6 "
Fergusson and Co. ...	360 "	36½ "
Mackintosh and Co. ...	260 "	14 "
Colvin and Co. ...	110 "	29½ "

The suffering caused by these failures was widespread, and commercial business received a severe shock.

Before the establishment of the Union Bank there was no exchange bank; one house buying bills from another at ten months' date. Nor were there any bill or freight brokers. Mr. William Prinsep, late a member of Palmer and Co., was the first bill-broker.

The regular trade in hides and skins commenced in 1834-35. The export of linseed commenced in 1834-35, of mustard seed in 1837-38, of poppy seed in 1852, of teel seed in 1836-37, and of tea in 1834-35.

The aggregate of exports and imports in 1813-14 was £7,300,000. The aggregate in 1849-50, was upwards of £21,300,000.

In 1848 the Union Bank failed. The directors were impeached and their reports were considered deceptive. There were stormy meetings on the occasion, and the *Englishman* of the day was read with the greatest avidity, as it contained bold exposures, stirring articles, squibs, inuendos and doggerel verses.

Messrs. Cockrell and Co. failed about the same time, and Sir Thomas Turton, the Administrator-General, was found guilty of defalcation to the extent of seven lakhs. Lord Dalhousie called him "the robber of robbers," the "robber of widows and orphans." This state of things led to the publication of the article in the *Calcutta Review* (Vol. IX); entitled "Commercial Morality and Commercial Prosperity in Bengal." It is now no longer a secret that Mr. Macleod Wylie, of high and exemplary character, was the author of the article.

Ships formerly took 15 to 20 days in coming up from Diamond harbour to Calcutta. In 1817 or 1818 private speculators constructed steam tugs to remove this inconvenience; and in 1835 the Calcutta Steam Association was formed with a capital of four lakhs, on which a profit of 53 per cent. was made.

To Lord William Bentinck we are indebted for steam navigation on the river above Calcutta in Bengal. Sir. Charles Trevelyan in his letter to the Secretary to the East India Inland Steam Navigation Company writes:—"The Ganges is the high road of a highly productive tract of country, containing upwards of sixty millions of inhabitants, and, now that the transit duties are abolished, the duty on sugar equalized, the land of the Upper Provinces put on a footing, which admits of the free investment of capital in agriculture, the judicial system reformed, and many other improvements are made or in progress, all tending to give free scope to the resources of the country; the trade is likely to increase with a rapidity of which former experience, founded on a totally different state of things, can furnish no criterion." In 1839 the Steamer *Lord William Bentinck* was employed in a voyage to ascertain how far the Junai, a branch of the Burmapooter, might be suited for steam purposes, and to convey a supply of coal to some eligible depôt in Assam. Captain Russell not only carried out this work, but also found, near the mart of Sahebgunge, a new river which was an important discovery.

In 1832 letters from England arrived in 150 to 190 days. Bishop Wilson took up the subject of steam communication and signed, with many others, a requisition for a public meeting which was held on the 4th June 1833. Bishop Wilson himself was

not present, and Sir Edward Ryan took the chair. Resolutions were passed and a memorial to Government was determined upon ; but it was not thought prudent then to open subscriptions in consequence of the failure of several agency-houses and the ruin it had caused to many. The next morning the Bishop, in his walk, was regretting this circumstance, when Lord William Bentinck met him. Sir Charles (then Mr.) Trevelyan, who was riding by the Bishop, said "I wish, my Lord, I cannot say how earnestly, that you would come forward and do something to direct the stream into the right channel again." This met with the silent approval of the Governor General. The Bishop wrote a letter to the Chief Magistrate in which he treated the question so conclusively that "*in one week thirty-three thousand rupees were subscribed by one hundred and seventy European and Native gentry.*" A public meeting was held in the town hall, and in a short time the subscribers numbered two thousand, five hundred and forty, and the subscription amounted to one hundred and seventy-six thousand rupees. We believe that at this meeting the Bishop said in his speech that "the extension of steam navigation to India would be opening the floodgates of measureless blessings to mankind."

On the 3rd June 1834, Charles Grant, the President of the Board of Control, introduced the question of steam communication into the House of Commons ; and the Committee appointed to consider the subject, passed a series of resolutions for carrying out the object.

Mr. C. B. Greenlaw, whose bust is to be seen in the town hall, was the Secretary to the New Bengal Steam Fund. For many years he worked incessantly and zealously, but quietly, to promote steam communication with England. It had been resolved that the Steamer *Forbes* should be employed for three voyages between Calcutta and Suez ; but the first voyage was unsuccessful, and the idea was consequently abandoned. The subscribers to the Bengal Steam Fund met at the town hall, on the 16th February 1836, when it was resolved to send memorials to the Home authorities. The original idea of steam communication was by the Cape. On the 5th March 1836 a public meeting was held in the town hall to consider the question of steam communication with England by way of the Red Sea. Sir Edward Ryan was in the chair, and Sir John Grant read the resolutions submitted by the Select Committee to the House of Commons. The purport of these was, that regular steam communication should be established from Bombay or Calcutta by the Red Sea ; and the meeting adopted a petition to the Home authorities for the establishment of steam communication between Indian Ports and Great Britain,

Lord William Bentinck's sentiments were well known. He said :—"I have been a zealous supporter of the cause of steam communication with England from the strongest conviction, confirmed by every day's further reflection, of its vast importance to innumerable interests both national and commercial."

Opinion on the subject of steam communication with England was divided here. The new Bengal Steam Committee were for the "*Comprehensive line*," while Sir Thomas Turton, W. P. Grant, and others were for the "*precursor line*," or for the line between Calcutta and Suez, on the ground that the French and English vessels in the Mediterranean afforded considerable facilities on the European side of the Isthmus. Both parties kept up the agitation until 1845, when the importance of the comprehensive scheme was acknowledged and accepted. It was considered best that steam communication should not be confined to Bombay or Calcutta only, but that it should embrace all the Presidencies.

Sir John Hobhouse said that, "it was calculated to benefit India to an extent beyond the power of the most ardent imagination to conceive." With the view of carrying out the comprehensive scheme, the Peninsular and Oriental Steam Navigation Company was formed. The *Hindustan* was the first steamer despatched to Calcutta, on the 24th September 1842, to open the comprehensive line by plying between Calcutta, Madras, Ceylon and Suez.

The Directors of the East India Company entered into postal arrangements with the Peninsular and Oriental Company. There were thus two mails, *viz.*, one conveyed by the East India Company between Bombay and Suez, and one by the Peninsular and Oriental Company between Calcutta and Suez, *via* Madras and Ceylon. The East India Company had at last to give the Bombay Branch of the Indian mail to the Peninsular and Oriental Company.

The outbreak of the mutiny in India necessitated the establishment of weekly communication. In November 1857, "the line between Bombay and Aden was extended to Suez, and in conjunction with it, a fortnightly line was opened between Marseilles and Alexandria, and the arrivals and departures of the Bombay mail being made to alternate with those of the Calcutta here instead of being coincident with them as was previously the case, a weekly communication with India was established."

The establishment and the extension of steam communication in Calcutta gave rise to enquiry for coal; and the Government of Bengal, anticipating the increasing consumption of the article, appointed a Committee on the 28th December 1836, for the purpose of enquiring into the localities of coals, whether found alone or mixed with other useful minerals, and reporting by what

128 Notes on Early Commerce in Bengal.

routes and at what expense coal could be brought to the banks of the navigable rivers. The Committee sat for several years; and the publication of their Reports has led to the discovery of a number of mines in different parts of the country and their working by private individuals and companies.

In 1804 coal had been observed by Mr. J. Delmain and brought to notice by Mr. W. Jones. The mines owned by the Bengal Coal Company, which belonged at one time to a private individual, were sold by auction and bought by Dwarka Nath Tagore, who formed the Bengal Coal Company.

The Bengal Chamber of Commerce was established in 1834 for the protection of commercial interests, and its history will show that it has rendered valuable services to the country.

PEARY CHAND MITTRA.

ART. VII.—PRELATES ON EVOLUTION.
(Independent Section.)

I.—*On the Relation between Science and Religion through the Principles of Unity, Order, and Causation.* Read before the Victoria Institute, by the Rt. Rev. BISHOP COTTERILL, D.D., etc.

II.—Charge to the Clergy and Laity, etc., by the ARCHBISHOP of CANTERBURY.

THESE two addresses mark a step in the history of modern science. As has been often observed, the attitude of orthodoxy towards new discoveries goes through three stages : firstly, we are told, that they are false and damnable ; next, that they are deserving of cautious examination ; lastly, that they are, and always have been, matters of general notoriety, and are without any bearing whatever on religion or morality. Dr. Tait has reached the second stage in regard to the Evolutional Philosophy, while Dr. Cotterill is already approaching, if he is not landed in, the third.

The readers of the *Review* may be willing to join in a brief examination of these remarkable documents, especially of the latter, which is really a complete acceptance on the part of a most able and learned Prelate of the latest teachings of Modern Physical Science. Here are the Bishop's own words :—

"The truth of the Law of Evolution may be tested almost without limit ; and it holds, in the organic world, nearly the same position as the law of gravitation holds in the inorganic. And this law is so entirely in accordance with the principles of the contemporaneous order observed in Nature that * * * it commends itself with almost irresistible force to the scientific mind as a general expression of the order of Nature."

So far, barring awkwardness of style, there is no doubt, or reserve. Yet, as a champion of orthodoxy, the Bishop has another word to say :—

"This, however, by no means lands us in agnosticism. Science has been found continuously in the direction of One infinite and Almighty Intelligence as the only explanation of the principles it requires. * * * 'God created man in His own image, in the image of God created *He* him.'"

Here is a camp of the Philistines, separated from us by a chasm which the Bishop has to fill or bridge. The position of the Evolutionists, which Dr. Cotterill recognizes as the true position of physical science, is that matter has developed into heterogeneous organisation from the humblest and most chaotic

beginnings; which development has produced man in all the various stages up to the highest that he has yet reached. And that this development is the result of an innate property in matter and not of creative exertions on the part of an anthropomorphic Deity external thereto. The orthodox position, on the other hand, is that an all-wise and all-good Dispenser has made man, such as he now is, cast in His own likeness, and inspired by Him, in a special manner, with "the breath of life." While admitting the first, the Bishop undertakes to support the second; and there is a heading called "special," in which it is stated that the publications of the Society from which the address emanates are called for by the dangerous tendency of such writings as those of Herbert Spencer. It is plain, then, that the undertaking of the author of the address is to reconcile the notion of an external Artificer with that of an internal law.

In order to carry out this design, Dr. Cotterill very ingeniously adopts the fundamental principle of Spencer and his school, *viz.*, that the physical evolution of the phenomenal universe implies a corresponding metaphysical basis. But, inasmuch as this implication, has not led the evolutionists to the belief in an anthropoid Deity,—but quite the reverse—the task is by no means accomplished when this point has been attained; only the rest of the work has to be performed with very untrustworthy materials.

The first of the Bishop's arguments is a type of all the rest; being a combination of two devices. In one respect he begs the question; in another he imputes to the system he is opposing a doctrine which it does not teach. Quoting, with approval, the words of a Mr. Balfour, he points to the evil done by holding that religion receives or requires the support of science. Then he proceeds to declare that it is necessary to prove that there is no conflict between them; "but, for the same reason that assures us that true Science and true Religion cannot be at variance, it also follows that they must have some correlation." Now, on this it seems proper to remark, that whoever desires that religion should be supported by Science, such is not the desire of the evolutionists; while no correlation between the two is admitted by them. By Science they understand the classification of the verifiable facts presented to the senses; by Religion they understand the feeling of the unverifiable absolute, which may minister to the emotions. When we follow the Bishop a little further, we get a clearer view of the vast difference here involved. For, in the next section, he tells us what he means by religion; namely,

a seeing of "God in all," of which the highest "can only be attained through Revelation * * through the knowledge of the true relations of the universe to God, and of God to the universe in the Incarnate Word, Jesus Christ." Neither natural Religion nor this its "highest" form is taught by modern science, nor is there any "correlation" between them. Science, perhaps, does not militate against these conclusions; but that is only because it regards them as entirely beyond its province.

The Bishop proceeds to say, that it is precisely the evidence which the senses afford that enables science to correct the conclusions which the senses suggest. This is true, but it conveys no reproach against modern science, which never undertakes to deal with those "objective realities," which, as the Bishop tells us, are unscientifically confounded with "subjective perceptions." It is only with the latter that modern science pretends to deal.

Dr. Cotterill goes on to state what his argument is. The principles which science not only postulates, but is compelled to verify, are common to Science and Religion: the latter alone "supplying them with a rational and adequate basis." This is either a truism, or an error. If by "Religion" is here meant only the feeling of the unverifiable Absolute underlying the phenomenal universe, that basis is assumed by Spencer in words which Dr. Cotterill himself cites elsewhere. This is one of the ways in which Spencer puts it:—

"The explication of that which is explicable does but bring out into greater clearness the inexplicableness of that which remains behind." (*First Principles*, p. 66.) And, indeed, all Spencer's teachings postulate a principle which is, in this sense, common to Religion and to Science. But, he adds, it is an insoluble enigma; while the Bishop holds that it is solved by Revelation. This is not common ground. Religion in that sense of the word, defines the Absolute; Science says that it is undefinable. Human faculties, she holds, can only cognise the conditioned; whatever Revelation may do, it cannot alter the fundamental laws of being.

Again the Bishop declares the insufficiency of Science in that she cannot make good the connexion, or consistency, between a fundamental unity in Nature, and an order of Nature which implies difference. This he says, leaves a void which requires "a profounder basis than any which Nature can itself provide." Yes, Science has to acknowledge that there is such a void; but why blame her, because she does not try to look for this "basis of a void" of which she never professes to say anything? For instance, the Bishop cites the authority of Professor Huxley to show that the characteristic phenomena of life are absolutely "marked off from all other phenomena." This, of course, may be only a proof that

Professor Huxley—and therefore presumably biology in general—has not reached the possible limits of the subject. But supposing that these limits *have* been reached; and that there *is* an insoluble element distinguishing sentient existence from “all other phenomena.” What then? Are we to assume, with Dr. Cotterill, that there is a “rational basis of unity beyond Nature, which Religion supplies?” Why should “the basis of unity beyond Nature” be rational; Why should it ever be supplied? As well might Ptolemy have called upon his disciples—as he probably did, though we know now that he had no right to do so—to acknowledge that the geocentric theory could alone supply a rational basis for the unity of the planetary system.

A still greater assumption follows. Science is reproved for assuming a fundamental connexion between all the forms of life, which is supposed to be disproved by breaches of continuity apparent in Nature; such as “the fact that the animal in all its forms requires nutrition which living organisms alone can produce, while the vegetable in all its forms can supply its waste from inorganic matter.” How does the Bishop know that this is a fact? Does he know, for a fact, that Monera and creatures of that sort consume organic food; and what does he think of the carnivorous plants? So dangerous is it—as we shall presently see the Primate of All England telling his clergy—to argue from imperfect information!

Again, in the same connexion, “reason, with its god-like” attributes of all sorts, “constitutes an essential distinction between the man and the mere animal to which all the rest of Nature can supply no parallel.” That may be Dr. Cotterill’s opinion: but it can have no higher value. Probably most modern naturalists would be of a contrary opinion. They would say that there was no difference between man and the more reasoning of the other animals greater than what is observable between the latter and the Zoophytes, or even between a sensitive plant and a lump of rock-crystal.

Passing by minor examples of these flaws, let us come on to the subject of causation, well enough expounded for the most part, but by no means fairly employed. Science, says the Bishop, gives no sufficient account of causation, which consists, he thinks, of three elements, “the antecedent, the consequent, and the *reason of the sequence*.” But this third element, though underlined by the Bishop, is not recognised as an element of causation by science. She only understands by causation that connexion between an event and an antecedent fact without which the event could not take place. Science deals with the *How*, not with the *Why*; and to quarrel with her on that account is as unreasonable

as to break with your green-grocer, because he cannot supply you with a grand piano.

In what ensues on the law of gravitation, the conservation of energy, and the more recondite properties of force and matter, the Bishop may be generally followed with both pleasure and profit. Excepting, indeed, where he confuses the line between the absolute and the relative, between that which may be verified, and that which must always be the field of speculation; enforcing the latter by references to Scripture which are out of place in a discussion on first principles. In postulating a metaphysical basis for the physical phenomena of which alone we can take cognisance the Bishop is entirely at one with the school of Spencer: his error here consists in the anthropoid form of the basis concluded. You have no more right to call the "metaphysical basis" Him, than to call it Her—with the ancient Chaldeans—or Them—with the modern polytheists of this and other countries.

But we must hasten to the great conclusion. The insufficiency of science being shown—either unfairly or superfluously as we please to take it,—the assumption is introduced that the *lacuna* is to be filled by revelation. We are assured, on page 24, that the law of evolution is indicated in "the Scriptural account of creation." And if this be so, the correlation will next be inferred, and the Q.E.D. applied to the theorem that "Religion supplies the only rational and adequate basis for the principles of science." But it is *not* so. The account of the origin of the phenomenal universe—"He made the Sun to rule the day, and the Moon to rule the night. He made the Stars also"—does not contain any apparent indication of evolution. The man of evolution was not started by a separate act "in the image of God," (however he may subsequently have reversed the process and made God's in his own). The law of evolution was left to be discovered, many millennia after the date of the book of Genesis, by Lamarck and his successors. The great apparent principle was "creation"—as the Bishop's own words admit—and creation is not recognised by modern science. The fact that the ingenuity of interested reasoners in the nineteenth century has been able to give the record a different twist, does not seem to justify the statement that the one account "indicates" the other and opposite one.

Finally, when you admit that your Scripture teaches that the One infinite intelligence is incomprehensible, why should you object to being "landed in agnosticism?" Are not the positions identical? Any one of the numerous systems of Theology may be useful and agreeable to one man or to another; but they are held, respectively, by equally good men, and on grounds other

than those of scientific demonstration. The address concludes with the usual appeals. Agnosticism is a form of "infidelity," all forms of which lead logically to Atheism. And with Atheism there can be no permanent goodness. "Of all systems the most illogical is one that demands morality, truth, and justice, without God." On the other hand, we find a student of modern philosophy stating, with equal distinctness, that "the independence of morality in relation to religion is a point on which almost all true philosophers are agreed, whether positive, critical, spiritualistic, or materialist" [*Rev. des Deux Mondes*, Vol. 41. p. 293]. That is only an assertion, but it is as good as the opposite, and the *onus probandi* does not seem easy of adjustment. So far, however, as *primâ facie* evidence goes, many persons will probably be of opinion that rectitude of conduct depends very little on speculative opinion. It is, so far as observation goes, the resultant of two forces: the aspiration for fullness of life in ourselves, and the deference to requirements of the society whereof we are members. It does not, to an ordinary mind at least, seem clear what is the necessity of Religion in such a matter, excepting, so far as a religious man may claim to have a fuller life than an Agnostic. Any way the clergy may rest assured that they cannot admit evolution without opening the road to agnosticism.

If Bishop Cotterill is unsatisfactory, what are we to say to the Primate of his Church? Dr. Tait is understood to be regarded with scant favour by the more rigorous Professors of Theology; and that may well be the case. Yet his liberalism is not logical, and he is at best but a sitter on two stools. In his Tonbridge charge, he states the case for agnosticism with great force and clearness, prefacing his statement with an unequivocal proclamation of the supremacy of reason in matters of speculation, as well religious as scientific. "To forbid the use of God's great gift of reason, as if to think for ourselves and follow the dictates of conscience were a sin, is an unauthorised claim."

So far good; but how is it to be reconciled with what follows? This is the Primate's definition of agnosticism. "I know nothing of things spiritual or metaphysical. You tell me that there is a world beyond the grave, etc. * * * I know nothing which is capable of corroborating such fancies."

I want certainty, and there is nothing certain but "the physical phenomena around me, and the unchanging laws of outward nature. It is just possible that there may be some truth in your imaginings, but I cannot ascertain it; and therefore, for all practical purposes, I shall consider them to be but vain." This may pass as a popular statement of the case, though wanting in scientific accuracy. For example, the modern philosophy accepted

by all the foremost men of the day undoubtedly agrees in this unwillingness to deal with the unverifiable ; but it does not by any means assert that the physical phenomena, etc., are " certainties." But it is quite true that, as Dr. Tait goes on to say, it confines its studies " to the irresistible course of this all-pervading machinery of which we find ourselves a part." It grounds its teaching upon the doctrine that phenomena are, not certainties in themselves, but certainties modified in, and by, our cognition ; and it accordingly declines to dogmatise about what it is precluded from cognising. Of the position thus stated, Dr. Tait offers no refutation ; and it would seem difficult to show any flaw in it from the point of view of *reason*, which he admits.

In a later part of his charge the Primate tries a feeble blow at the law of evolution as applied to mankind. He appeals powerfully to his hearers to accept the belief in a first cause ; and so far he does no more than what the leaders of the agnostics themselves have done. But he proceeds to give them a piece of advice which they cannot adopt when he bids them, " Look to the nature of man at his best, not to the undeveloped nature of the savage, but that mature nature which Bishop Butler considers the model of the real man, and therefore the specimen of what he is in truth." Bishop Butler's ideal man is, of course, no more a specimen of average manhood than Archbishop Tait's a century or so later. Both are very striking instances of development, just as a thorough-bred racer is, or a double dahlia : but in what possible way can any of the three be cited as disproof of evolution ? Are they not rather plain illustrations of its operation not to be fully explained, or accounted for, on any other theory ?

Indeed, the Primate seems ultimately to retire from the contest with a baffled and weary spirit. At the early part of his personation his " only fear in that before such systems are smitten by the sword of argument, *** they may do much harm to unstable souls." But he ends by warning his hearers against the ordinary use of arguments, lest in a mistaken zeal they give their opponents occasion to scoff at their " injudicious treatment of subjects which are very intricate, and require much knowledge before we can handle them." Very true, your Grace. And so is the conclusion, that " very little is gained for the good of souls in such cases by argument" ; only what becomes of the unstable souls in whose behoof modern science is to be " smitten with the sword" now discovered to be so badly tempered ?

It is, not likely that theologians will accept the advice of their opponents ; yet they might do worse. The persons described by Dr. Tait as " agnostics" are not the worst enemies of theology when they recommend that it should be removed from the category

of the sciences, and installed in the region of the emotions. An Atheist is as obviously at a disadvantage, in the world, compared with a religious man, as one without an ear for music would be in a concert-room. A readiness to cherish a belief in a first cause, to cultivate a spirit of seriousness, to open our hearts to a mysterious influence which we cannot weigh or analyse, yet which may attune our emotions to high pitch, can never do us any harm, even though it be not essential to good conduct. Only the man who understands what science is, and what it is not, will beware of dogmatizing in one department, as he may lawfully do in the other. The ultimate distinction between Science and Religion is this : one must be felt, the other can be taught. In Science, authority may be accepted by the mass of mankind, who have not time to master all its elements ; in Religion every man must adopt that which he can assimilate to the benefit of his character and to his mental happiness and comfort. So far as the liberalism of the leaders of modern orthodoxy helps to establish such a harmony we may thankfully acknowledge their action. And it is to harmony, fortunately that all honest thought is ever tending.

H. G. KEENE.

ART. VIII.—HOW ARE THEY TO LIVE ?

IN a former number of this *Review** an attempt was made to exhibit some of the peculiarities of peasant-life in Upper India. In that Article a brief mention was made of the vast and rapidly increasing population ; of the consequent diminution in the incomes of families and individuals ; of the chronic misery of the people, varied by occasional periods of famine and pestilence, which are Nature's stern remedies for congestion of population ; and of the crimes to which such a state of things offers such constant temptations. And a hint was given that these evils were—partly, at least—the result of well meant attempts to pour new wine into old bottles, by the introduction into oriental life of ideas and practices that had grown to maturity out of a different set of surroundings.

Since that time the report of the Famine Commission has appeared, showing that a most deplorable loss of human life has been caused by the late scarcity ; on that subject, at least, there is no lack either of clearness or of unanimity among the members. And an even more startling comment upon the facts of the case has been presented by a dependency from which, as from India, Her Majesty derives one of her titles, but where the people (though not equally formidable when provoked) are more irritable, and less submissive than in India ; being more exposed to the influence of political agitators. In *the Nineteenth Century* for September last Mr. Froude has given a picture of the state of Ireland, and of the causes which have brought it about, which must be fresh in recollection.—“ Successive administrations,” he writes, “ have pretended to govern there ; and, as a result we saw in the last winter the miserable Irish people sending emissaries, hat in hand, round the globe to beg for six-pences to save them from starving..... We may make the best resolutions : so our fathers made resolutions ; but they availed nothing, and ours will avail nothing. We have failed—failed ignominiously—and bad as any Government would be which Ireland could establish for herself, it could hardly be worse than the impotent mockery with which the English connection has provided it..... We have insisted on transferring to Ireland our own laws and institutions..... We have never cared to inquire whether they suited the Irish conditions. . We concluded that, because they suited us they must be good everywhere.” *Mutato nomine fabula narratur.*

There is hardly a word of this that will not apply with equal force to the British rule in India. Only two points distinguish the two cases. Hitherto we have been more afraid of the Indians than we have been of the Irish ; and consequently we have not so thoroughly substituted our own institutions in the former country as in the latter. Our tendency, however, is in the same direction. Wherever we can, we create, and support, sinecure landlords ; and we make laws, founded on Grim gribber or on Jeremy Bentham (as the case may be), which are slowly obliterating the ancestral systems of Manu and Mohamed. And in both countries the people are miserable and alienated. It is indeed but natural that alienation towards the rulers should follow the misery of the subjects.—

“ Upon the King ! let us our lives, our souls,
Our debts, our careful wives,
Our children, and our sins, lay on the King ! ”

That is the burden of sovereignty ; even heavier, now, than in the days of Shakspeare. How is it to be borne ? Are we prepared to exercise sovereign functions with benevolent but arbitrary hand—as alone backward communities are accustomed to be governed—or are we ready to give up the attempt and leave the people to their own devices ? For the *via media* has evidently failed.

With the laudable desire of fulfilling this responsibility, the Government of Lord Lytton—with the sanction of the Home authorities—caused inquiries to be made by a roving commission, whose first report was published in June 1880.

The despatch of the Secretary of State by which the Commission was appointed, was issued in the beginning of 1878, and enjoined the careful collection of all “ information which may assist future administrators in the task of limiting the range or mitigating the intensity of these calamities.” The members assisted by a most able Secretary (Mr. C. A. Elliott, C.S.I.)—divided this task into two parts, and their first report—published with such commendable punctuality—deals with the history and past famines and with the measures which seem to them desirable for the relief of suffering and prevention of mortality in those that are to come. The second report—not yet in the hands of the Indian public—is to treat of the social and economical measures which may appear best calculated to enable the people to resist the effects of drought and to approach that State immunity from periodical starvation which has been attained by most civilised nations.

The subject-matter of the first report has been pretty well threshed out by the daily press. In a country like India famine is of constant recurrence, and is always caused by drought ; there

is no instance in Indian history of a general scarcity due to excess of water, or flood. The arrival of famine is indicated by a rise of prices which may be roughly stated to occur whenever one day's wages will not bring an unskilled labourer one day's food. Its prevalence is pointed out by increased mortality; an increase, let us say, from two per mille per mensem to four or more. But at these stages of the calamity, though relief may be the duty of the State, the time for prevention has passed. Putting aside, for the present the preventive of the subject, the Commissioners proceed to show what has been the attitude of the British rulers of India towards past famines, and what, in their opinion, should be the permanent line of treatment laid down for their future mitigation in the future. Of the conduct of the Mughal Emperors, they say nothing; and, indeed, but little is known on this part of the matter. But they carefully discriminate between the famines that have, in recent times, prevailed in different provinces of the Empire, and wisely. Because one-half of the Great Peninsula is governed as to drought by the behaviour of meteorologic influences which have not been shown to have any action in common with those which regulate the other. There are two distinct main lines of periodic rainfall: the North-East Monsoon which affects the Coromandel Coast and the Lower Provinces, and the South-West Monsoon which affects the Malabar Coast and its dependent regions. The north of India, however, seems to suffer from irregularities in both quarters; for the great famine of 1771 in Bengal was followed by the "*Chalisa*" of Hindustan in 1783, just as the Bengal famine of 1876 was followed by a similar disaster in Madras and the North-West Provinces with still greater rapidity.

Going back to the history of the Mughal Empire, it would appear that Hindustan, or Upper India, has been always subject to a two-fold periodicity of famine. There has been a total drought about four times in each century; and there has been a scarcity of less violence about midway between each pair of total failures. Leaving these minor cases for future notice, let us confine ourselves for the present to the great famines. As to these, it appears that they are caused by the periodical rains failing to reach the tracts beyond the Jumna and Ganges rivers; and that the rulers to whom this part of India—in every respect the most important—is entrusted may reckon upon having to deal with the results of such a calamity whenever they observe that after about twenty-five average years, one dry year is being followed by another.

It was thought at one time that we could get a nearer approach to accuracy of forecast by observation of the periodicity of spots on the sun. But the Famine Commissioners are not prepared

to say more on this subject than that it is worthy of careful observation. At present, as they justly remark, the evidence is both insufficient and contradictory. This was clearly shown by Professor Archibald in a recent number of this *Review* (January 1878). The writer established the fact that experts are not even agreed as to whether a maximum maculation indicates maximum rainfall or the reverse. He himself inclines to think that it indicates a minimum; but he is careful to add that even at Madras, it is still doubtful whether the variation of sun-spots "is distinctly connected with the periodical recurrence of famine." An equally unsolved, and equally momentous, question is whether the failure of rain is at all synchronous all over the globe; no reason having been shown why such an influence should be peculiarly shown at Madras or any other particular place. And it would certainly seem but reasonable that such a remote and subtle influence, if it acted at all, would not confine its operation to that part of the ocean which sends up its vapours to furnish the Indian periodical rains. There appears, then, to be an air of charlatanism about dogmatising just yet on the warning to be obtained from this source. Professor Archibald's conclusion, however, (so far as it may be accepted,) is full of hope for the present. If we are approaching a season of maximum solar maculation, we *may* be safe against any great disturbance of rainfall for the next few years. The same hope is afforded, so far as India is concerned, by the history of the past. There is no doubt that General Sabine's observations have established a connection between solar spots and the general magnetic condition of the earth. Whether the Indian rainfall depends on that condition, we do not know. But magnetic and solar readings may be accepted as collateral warnings; and they should certainly not be neglected.

The annalists of the Mughal Empire do not usually bestow much thought on the state of the multitude. They never emerged from the mediæval view of history, as a picturesque chronicle of the wars of great Chieftains in golden armour. Nevertheless, the last and best of these writers, Khafi Khan, makes mention of two great droughts that happened in his own days—of one, which occurred in 1630 A.D., he seems to have had little or no personal experience; and he only refers to it in describing a campaign which was then in progress. It was a two-years' drought, during which the distress was dreadful: "life was offered for a loaf, but no man would deal." Emigration and starvation desolated the Empire. The Emperor Shahjehan at once grappled with the difficulty in the only way which is possible when once the calamity has set in. Soup-kitchens were opened, and bread was prepared

for all who chose to come to his relief-houses (*langar khanas*), five thousand rupees were distributed every Monday in the camp of this usually avaricious monarch. Half a lakh was expended in doles at Ahmedabad alone. Lastly, remissions of revenue to the extent of two crores of rupees (say one-tenth of the revenue of the year) were granted from the collections. In 1660 another terrible drought occurred which the historian appears to have witnessed.—“Many districts lay entirely waste, and crowds of people from all parts made their way to the capital.” Aurangzeb was now on the throne ; and his measures were such as his father’s had been. He, moreover, gave every encouragement to the importation of food, remitting the transit-dues as he did the other items of taxation. It is said, that his able administration saved the empire from a crisis, and prolonged millions of lives.

In the century that followed, war and anarchy, followed by invasions from without, aggravated the sufferings of the people till famine grew almost chronic, and the whole of Upper India became a wilderness. In 1770-1 a special scarcity fell upon Bengal and Behar—then recently come under British sway—in which it was officially estimated that ten millions of souls perished. In 1783-4 another famine fell with even greater severity upon Upper India ; this was the famous *Chálisa Kánt*, when—as stated in the *Calcutta Gazette* for 13th May 1784,—wheat sold at Lahore at the rate of one rupee for four seers. This famine was due to three successive years of drought ; and some particulars, derived from the testimony of eye-witnesses, will be found in a work by the present writer (*Fall of the Moghal Empire*, pp. 152 f.f.) *The native Government*, we are expressly told, *offered no assistance*. The winter of 1784 brought relief to the worn-out survivors ; but the memory of those days has never died away. During the period that succeeded the empire was occupied by a British administration ; and the next great famine occurred in 1803 : the next in 1837 : the next in 1860.

These facts confirm what has been said about the periodical occurrence of those great droughts by which famine has been caused in Upper India. For their relief we can do little more than add, to the simple remedies of the Mughal Emperors, the prophylactic system inculcated by experience and the methodical application of assistance rendered possible by modern skill. As to the first, it was observed in a provincial report submitted by Mr. Girdlestone in 1868, that “it is most improbable that a general famine will overtake the North-West again without giving due notice of its coming. Such a calamity is gradual in its approach. In 1785, in 1803, in 1837, and in 1860, it was not the drought of one season but of several which caused the mischief. During the

preceding years the rain had been less than usual throughout the country ; and, at last, by way of climax, came a year in which hardly any fell at all." Forewarned is fore-armed ; the Governments of Upper India may begin to take especial heed about 1885 ; and the next general drought need not, if properly anticipated, cause a general famine in their dominions. It is not to be supposed that, with their increase of enlightenment and of physical facilities, they will accept less obligation than what was accepted by their rude predecessors. The facilitation of distribution and the administration of relief to the various classes of sufferers are pointed out by the report with discriminative care and minuteness ; these will have to be prepared for, when protracted drought is seen approaching. On minor points the Commissioners seem to be less unanimous. It may perhaps be gathered that the majority (inclusive of Mr. Elliott) are not prepared to go the whole length of saying that life—even the most useless—ought to be protected at whatever cost. It may even be their unexpressed feeling that the State ought to look upon a famine as a natural vent for the disappearance of the refuse population. In one place they say of such agencies that "famine is really only one, and perhaps not the most deadly, of numerous influences by which at present human life among the people of India is cut short ; and which can only be effectually counteracted by the general advance of society in wealth, knowledge, and material resources."

This is of course a most important doctrine. If it is accepted, the relief of present misery becomes a minor, though most interesting matter. If it be admitted that, after all that can be done, this awful minister of Nature will work pretty much the same on uncivilised communities, the great and paramount duty must be to raise the condition of the population into a condition suited to offer an intrinsic resistance. It is like the case of an unsanitated city. When pestilence breaks out, we do what we can by means of dispensaries and hospitals ; but the wisest course is to call in the engineer.

Already we hear of the increased recuperative power of the country (Report, Sec. 84). This is only another term to express the progress of society towards a healthier condition. Being subject to a visitation like a total periodical failure of water for two years, Hindustan and the Punjab may never enjoy the complete immunity from scarcity which we see in a country like England, which is manned by a self-relying people chiefly fed by commerce. But the fact shown by the report, that each successive drought causes less and less suffering, points to the possibility of further improvement.

An additional unmistakeable encouragement is given by the

periodicity which history seems to have established, as well for the great droughts as for these minor intervening periods of bad seasons which have been cursorily mentioned above. These latter will be more readily encountered; and indeed the loss which they cause is in process of serious diminution already, if only from the improvement of communications. In former times constant local suffering existed, from causes which, originating locally, were intensified by being pent in to their localities. These are now alleviated, while they are spread over a larger area, by the agency of railroads. We need not expect to hear in future of the people dying wholesale in one district, while the neighbouring districts enjoy plenty. The pressure of local distress is now distributed in two ways. The poorer classes move to great public works, or to less densely peopled regions; and the surplus food of a prosperous tract is drawn to the afflicted part by rise of prices. In such cases the duty of the State is almost confined to seeing that trade acts freely, and on the best information, dealing leniently at the same time with the collection of rent and revenue. The first is all important. The grain-dealers are the natural commissariat of the people; attempts to thwart, or dictate to, which will simply have the effect of paralysing the only machinery on which you have to depend. As for the revenue and rents, judicious suspensions of the public demand where rents cannot be collected, coupled with a reasonable rate of interest on such suspensions, is all that can be expected. The measure of the rate of interest would be that it should be such as to make the landlords prefer to have the State, rather than the banker, for a creditor. These points are touched, though not, perhaps, with sufficient firmness, by the report.

It is unnecessary to say more on the subject of *Relief*. It has been recognised as giving rise to the necessity for a sort of poor-law for India; a special branch of Finance and of Administration. The above brief remarks have been only intended to popularise—and in some degree—to supplement the arguments of the Commissioners. But the fact that the minor scarcities, due every ten or twelve years, are found to admit of such comparatively easy treatment deserves farther notice as affording grounds for hoping that social and economical reform, proceeding on indigenous and popular lines, is likely to lead to a still further amelioration in the permanent condition of the country. And it is to this that we must hope that the next part of the report will be vigorously addressed. Improved communications have done much; but they have only succeeded so far as they have been adopted by the public. And it is from the public that further improvement in national robustness must proceed. A drill-sergeant can teach

us gymnastics, and a physician can give us medicine ; but, unless energy, self-control, regimen, and a general compliance with hygiene, are all present, we shall not get stronger or more prepared to resist disease. As with the body physical, so with the body politic ; which is little more than a multiplied individual, and is always best considered as an organised whole.

The Commissioners may fairly be credited with having helped to point out premonitory signs that will help the Indian Governments, local and supreme, to know when droughts are assuming a character that may end in famine. They have also sketched a general policy, financial and administrative, which is intended to enable the Government to assist the people in encountering the stress of such calamities. They have naturally drawn especial attention to the management of poor-houses for the helpless of village-inspection, and of reproductive relief-works for the support of the able bodied. These things, indeed, are by no means novelties ; in Upper India, at least, where measures of the kind were largely adopted in 1861, and with enormous success. There is, moreover, a third duty, the care of the secluded gentlewomen, and the old men who have seen better days, the *veryognośi* (as they used to be called in mediæval Venice) "to beg who are ashamed." No scheme of pauper relief is complete that does not provide for these classes also. In the great famine of 1860 all these things were done, and great expense incurred in the North-West Provinces. District officers, like Mr. Strachey (now Sir John) made poor-houses almost self-supporting, during the latter part of the time at least ; a daily average of 143,000 able bodied paupers were employed on canal and road extension throughout the afflicted districts ; suitable employment was provided for the shame-faced in their own homes. In one district (Muzufarnagar)* where the distress fell heavily on poor Musulmans and others of that sort, the Commissioner reported that there was not a village that had not been personally visited and inspected by an European officer. Over three thousand rupees a day were spent in the North-West Provinces alone in the relief of paupers at their own homes and in poor-houses ; the average number relieved being over sixty thousand daily. The Government land-revenue was remitted, temporarily or indefinitely, to the extent of thirteen and a quarter lakhs of rupees ; the relief works cast first and last, a nearly equal sum, of which the North-West-Provinces' share was about three-fourths, the rest falling on the Punjab. About half a million of the male population are supposed to have emigrated. The excess mortality was roughly estimated at 35 per

thousand—3 per mensem on the average—the loss aggregated about a million souls.

The question that remains to be answered is whether all this waste, and the suffering that it indicates, could not be to some extent guarded against by a policy, for ordinary times, which would engender among the people such habits that they would not become utterly demoralised and helpless upon a failure of the rains. Whenever agriculture is entirely suspended, the state of an agricultural population in enforced and unfed idleness is very pitiable; but we know from the experience of the past that a failure of the rains acts variously in various circumstances. Artificial supplies of water, provided by the forethought of the Government or of individuals, and combined with a little reserve fund of capital, and the habits to which its accumulation is due—these things are known to have relieved distress in many places during the last famine, and even to have caused, in some rare instances, an unusual amount of occasional prosperity in the very heart of trouble. Cannot such become the rule rather than the exception ?

The scenes that are presented, even in a mere scarcity, or minor famine, are enough to move the compassion of any one who witnesses them. Thus, in some parts of Upper India, in September 1877, there was a general débâcle, as if the country were menaced by a Nadir Shah. The people lost both heart and head. Some sold their cattle and their poor scraps of furniture, and sat down helpless; others collected their little possessions and set off from their homes with vague notions of escape. Their great idea seemed to be to get to "Málwa," a country unknown to British territorial arrangements, but marked in popular tradition as a land of perpetual plenty :—

*" Malwa des men jai gambhir,
Pag pag roti, jag jag nir."*
(In Malwa land you're always fed,
One step water, next step bread.)

Not that they had any exact knowledge of its situation or present condition, but they had heard of the country as an asylum in past famines; and they trusted that if they could once get there, all might yet be well. The only two programmes that presented themselves to their minds were, either to sell all they had and die slowly where they were; or else, in the case of more active characters, to run away and try what chance there might be somewhere else. But still there was a third class, a minority, it is true, who kept their cattle to work their wells, and who raised fodder for the patient brutes wherever water could be procured, living themselves on anything they could

pick up, and stoutly waiting for better days. Is there no hope that this class may be increased? That is a question which journalism can put, but cannot answer. But if it be true that Jats, Kurmis, Kachis, and industrious people generally, suffered less than Thakurs, Rangars, &c., in past famines, the fact may suggest a trace in the direction of inquiry into the habits of the agriculturist. If it be true, that cultivation is pressing upon pasture, it may be found that something might be done by lowering the Government demand on a certain proportion of area to be set aside as common pasture in every township. If it be true, that the snow-fed streams by which the inexhaustible treasures of the Himalaya could be tapped are still wasted to a considerable extent by flowing on a wrong level, there will be work still left for the canal engineer. If it be true, that the water table of the country has risen by percolation from the embankments of existing canals, an impetus may be given to the sinking of wells on money advanced by the State. Drainage operations may be found feasible, by which surplus water may be stored in appropriate situations instead of lying in hollows to breed disease and death. First of all, the systems of peremptorily collecting in cash from peasants who have no cash to give, and who are thereby forced to discount their hardly-raised produce and to live in a chronic diathesis of debt—this should, and must be amended. Some imitation of the opium-system, and of the methods of the Dutch East Indies, must be adopted, if the Indian agriculturist is ever to become really emancipated, solvent, and hopeful.

To place the peasantry of Northern India in a situation where they can—if they please—prepare themselves to face a certain amount of scarcity is an ideal. But it ought not to be disposed of with a sneer or a shrug of the shoulders. The worst evils of Indian famines have not usually proceeded from actual failure of the means of subsistence, but from the inability of the mass of the people to obtain them. The grain which was needed for their simple wants was there. But the danger of its being exhausted by a succession of bad seasons led to prices that were prohibitory for a people devoid of capital. The problem is to enable the people to form reserves, whether of food or of the money to buy food with; and this problem is one, the solution of which ought not, surely, to be lightly abandoned by a civilised Government. Even the Mahomedans adopted some measures of this kind; and it will hardly be denied that the administration of Sher Shah and of his pupil, Rajah Todar Mal, was better for the agricultural community—the bulk that is and the pieka population—than any by which it has yet been succeeded.

Nature, too, did something in those days. With a thinner population there was less land under plough, consequently there was more waste-land; that is to say, more trees existed, and those not only served to increase the amount of moisture but to protect extensive pasture-grounds. Now, when the field has almost destroyed the forest, a failure of the summer rains leaves the cattle to starve. Rich men may send their herds to the *terai* lands under the Himalaya; but in the case of ordinary villagers the cattle are only saved with difficulty, at great expense and in small numbers. The British Government cannot hinder the increase of population, nor can it take charge of all the oxen of the country in the Oudh jungles. But it may, by stimulating the planting of trees and the preserving of commons and grazing-grounds, make some provision for the evils under notice. A bounty upon trees, a remission of revenue on a certain area of grass-land, a liberal advance of cash to be sunk in wells, would do much to restore in a few years the pastoral resources of the country.

As to the storage of water again, much remains to be done. The Himalayan snows afford an almost inexhaustible supply of water. That water is largely available for irrigation. In this respect the British have greatly advanced upon the labours of their predecessors. The Mughals had only three canals, the Ravi canal and the two from the Jumna. The British have largely developed these. They have also tapped the Ganges and other rivers not utilised at all before. But they have introduced two evils that have gone far to neutralise these benefits. From erroneous levels and other defects of management, inevitable perhaps in novel undertakings on so large a scale, they have impoverished the soil in most places where these canals have passed. And, what is almost worse, they have introduced a rise of the general water-table and a system of morasses that have been very fatal to the public health. It is commonly said, and is probably true, that, if you were to poll the people on the Ganges canal from Saharunpore to Etawa, you would find a large majority in favour of having that gigantic work utterly destroyed. To those who can recollect the gathering at Roorkee in 1854 and the enthusiasm of the succeeding year or two, this seems a lamentable conclusion; but it really affords no reason for despair. The evils caused by bad engineering it must be the province of good engineering to remove. If the levelling and the general administration and the canals were properly attended to, and if the streams that are not perennial and the rain-water that is redundant when it falls, were stored in appropriate localities, it would be found, in all probability, that there would be water enough to supplement the work and the possible well

irrigation. But this also should be very largely increased. It is no exaggeration to say that in place of new wells being made where canal percolation has raised the level of the subsoil water, many old masonry wells in those regions have been allowed to fall into utter decay.

But the greatest measure of all for the relief of the agriculturists of Upper India, is one which distinctly involves the admission that the Mughal rulers were wiser than their successors; that is to say, in the manner in which the revenue was collected. To exact cash from the yeomanry in a country where a family is supported by a holding of from five to ten acres, and where specie only exists in dribblets received from beyond seas, is to throw upon the revenue-payers a burden under which they cannot walk. The reply is kept in stereotype. We are told that the British Government pays its *employés* in cash, and that it must consequently collect in cash. We are further told that the assessment is so light, *communibus annis*, that the people may well save in a good year the money that they will be required to pay in a bad one. Both these answers are radically untrue. Akbar paid his *employés* in cash, but he collected in kind—except on certain valuable and readily marketable crops, such as cotton and sugar, grown for commercial purposes, and by persons presumably possessed of resources. The Dutch of Java do not burden their subjects with the risk and trouble of selling their crops. The British themselves do not adopt this course with opium. But there are many crops besides opium which an organisation, such as the British Government of India could readily command, might put into the market far more profitably than the poor peasant. A man growing, let us say, a hundred bushels of wheat a year, cannot arrange to sell his little venture in the best market. He has to pay very little, nominally, for his lands, perhaps fifty rupees. But he has not got so much, not if he were to sell all the jewellery of his wife. He is obliged, therefore, to go to the village banker before the crop is reaped, and to borrow the money on that security. When the crop is ripe the banker carries it off, and sells it to a wholesale dealer at a price which gives him a large profit, and that dealer divides it among petty chandlers, who dole it out again at fancy prices; so that the man by the sweat of whose brows it was produced has to pay cent. per cent. for a meal of his own grain.

Now, suppose that the system of Akbar and Todar Mal were still in existence, all the cereal crops would be divided. These small farmers out of their hundred bushels would give 8 or 10 to the *Tahsildar*. The *Tahsildar*, under proper European supervision

as in the opium department, would weigh in his collections to the Collector. The Railway would carry away the Government grain to the great centres of commerce. Where it would be sold by public auction to dealers who would distribute it to the best advantages, while the less valuable grains, on which the people chiefly feed, would be sold on the spot to the retail corn chandlers. But the people freed from debt, would be enabled to keep a small portion of such grains stored in their houses for an unrainy day.

The other fallacy needs less exposure. It is said that the people can, if they please, save in good years what they are called on to pay in bad. Perhaps, if there were popular saving banks, and a state of comparative opulence to start from, this might be true ; only as a fact nothing of the sort takes place. Tied and bound in the meshes of debt cast around them by the existing system, they simply live from hand to mouth, in good years getting low prices, and in bad years living on short commons.

The above criticisms, crude as they may seem, are the result of experience. They are offered (in no spirit of pessimism) merely that they may be candidly examined by practical but not prejudiced men.

Famine, it is generally admitted, cannot be entirely obviated in India, as that country is at present circumstanced. As long as a vast tract of this sort contains ill-distributed agricultural communities, and maintains but a small export trade, it must always depend largely upon the vicissitudes of seasons. But, at the same time, famine is so obviously one of those evils the prevention of which is better than the cure, it is so evidently preferable that people should not be plunged in distress merely that a certain proportion may be helped out again ; that the case is clearly one rather for economical than for purely administrative treatment. The policy is hard to hit ; the more so by reason of the slowness with which the rulers of British India have arrived at the correct appreciation of the precise nature of the evil. It is only lately that persons in power have learnt to see that the Indian peasantry are suffering not only acutely but chronically, and that this part of their sufferings increases *pari passu* with the increase of efficiency and science in the administration. When these things are once clearly realised the discovery of remedies ought not to be far off.

The two primary causes that expose oriental populations to a degree from which other societies are now almost entirely free are named above. The undeveloped state of commerce is, of course, the most remarkable difference between the two sets of conditions. But it is not the cause that is most amenable to immediate action, the production of exportable commodities and the power of

obtaining supplies of food without difficulty from foreign countries cannot be created all at once. And this is fortunately of less importance since India is evidently fully capable of raising within her own borders food for any number of inhabitants that she is likely to contain during the next generation.

The other cause—the unequal distribution of the population—is at once the most active cause of chronic distress, and the one that is most readily remedied.

The state of things may be thus briefly described. Suppose Great Britain in the middle ages to have had the same number of inhabitants, but only a third of the same amount of inland communication as it has at present. Suppose, then, that the land of the southern counties, under an unscientific system of farming, and without much assistance from capital, were overcropped and densely peopled, while the northern parts could not raise corn for want of labour. Is it not plain that London and Bristol, Kent and Dorset, would present constant calamities which could not be cured until the surplus population of the south moved northwards? Some of these calamities would be low wages, high prices; here a superfatation of produce rotting for want of buyers, there are almost total absence of the means of support; finally starvation and epidemic disease, such as history shows to have been general in those times, even though the population was not, in fact, more than one-tenth of what it is now. That is the exact state of modern India. With but little sea trade, but considerable means of internal distribution; with exhausted tracts of over peopled land in one place, and with breadths of virgin soil in others, where no food can be raised, and the land is left to cattle and to the beasts that prey upon them there is hardly any portion of the country whose inhabitants enjoy even a normal time. And, therefore, when the rains fail for two seasons in succession, there is no reserve fund out of which the lives of the population can be supported; and the Government is overwhelmed with the magnitude of a task which ought never to devolve upon it. And all the time the food which might support its producers is going to other parts of the country where there is more money, so that those by whom it is grown must either steal or starve.

But, no; there is a third remedy, tried by the people in an unsystematic way, but surely capable of being worked out to better effect by the aid of a wise and strong central Government. Mention was made above of the tendency of the people to seek an almost imaginary land of Cockaine, called “Málwa” in their traditions. Only unhappily this Canaan is never reached. A traveller in 1877, in the neighbourhood of Indore, met a long string of these famished wanderers, “going”—so they said—“to Málwa.” “This

is Málwa," said the traveller; but his assurance was received with bland incredulity. Their "Malwa" was still on the horizon; and we may safely conclude that they never arrived there. But such lands exist, nevertheless, though not where they seek them. Not long ago, the Chief Commissioner of the Central Provinces made an attempt which was creditable alike to his intelligence and his feelings.

In the North-West Provinces, the average pressure of population is 378 per square mile; in Oudh it is 468; in the Central Provinces it is 97. Some parts of the former run over 600, some parts of the latter fall as low as 22. Yet the land is better, not only as less worked, but by natural quality. Struck with these facts, Mr. Morris set aside land and money, and endeavoured to persuade labourers to leave the crowded tracts of the older British possessions and migrate to his land of promise. This was not entirely a new project. So far back as the reign of the Emperor Akbar the land of Gondwana was opened out by conquest, that rough pioneer of progress. "The returning troops," we are told, "even more than those who stayed behind, may have contributed to the settlement of the country by describing its beauty and fertility in their over-crowded villages, and there are traces of a considerable Hindu immigration shortly afterwards." (*Gazetteer of the Central Provinces*, p. 127). Mr. Morris's experiment was only partially successful. A gulf of ignorance and mistrust extends between the British rulers and their Indian subjects, which has not yet been bridged by the good intentions of the former. But what was done by the Mughals may be done by the Mughals' successors. The movement under Akbar was towards Jubbulpore, and helped to form the reputation of the adjacent country of Malwa. But Malwa has been since desolated; and it is now in the hands of a foreign power—Holkar—which, without disparagement, we may assume to be unwilling to receive our redundant neighbours. But the fame of the eastern parts of Gondwana, notably of the Chatisgarh Division, only requires to be equally known to become no less attractive than Malwa, and much more accessible and useful.

To this subject even more than to relief works, should the attention of the Government direct itself. The landholders of the distressed districts are both able and willing to employ labour and relieve want just as well as we can, and without collecting the people at remote centres where they yield grudging task-work and forget old ties and duties. For less money, a systematic recommendation and encouragement of inland colonisation might be made. Till that is done, moreover, it is worse than idle to encourage emigration to transmarine colonies, whether they belong to foreigners or to the British Empire.

Anything of the nature of poor-law relief on the English plan is but too likely to prove an expensive failure. Money collected by rating and laid out under a centralised system does not go so far as it ought ; while this way of relieving distress has the further serious disadvantage of paralysing local exertion, while it both disorganises and demoralises local society. But to substitute allotments in the Central Provinces, for earthworks and excavations which can be better done by professional labour, is to give relief that will be permanent. Like, "the quality of mercy," such a policy is "twice blessed;" it relieves the want of labour in one place, by relieving the want of land in another. It is difficult, but it is not impossible ; and it is to do difficult work that the rulers of India should be incited by their many advantages, no less than by the pressing nature of the case.

The next time that Hindustan was afflicted by prolonged drought the benefits of this scheme would appear in two directions. The population left behind would be less numerous, and would therefore have better incomes and require less food. And the food that they still required would be partly supplied by the new colonies in the Central Provinces.

When all is done, however, the work suggested by the Commissioners will remain to do. The people must advance in "wealth, knowledge, and material resources." A consistent, intelligent, and firm policy is all that the British rulers can contribute to this great end.

It has been hitherto the great advantage of India that under British rule, her people and their resources have been occasionally fortunate enough to avail themselves of the services of an able and disinterested despot who, whether as Viceroy, as Governor (or Lieutenant-Governor), even in the minor shape of Commissioner or District Officer, has by quiet but persistent force led them into profitable paths. Unfortunately these stars have shone in a vast intermediate space of bureaucracy, where a number of *employés*—with more force of character than trained intellectual acuteness, and with more traditional pedantry than either,—have produced a baleful monotony and unsympathetic administration, which goes rumbling on in mechanical routine until some great disaster brings it up with a round turn. A recent French writer has well observed that "it is natural that a government should desire to have an administration devoted to its principles, but it ought also to desire an administration that is *good* ; functionaries who know their business, and, in order to know it, to have learned it is not a bad preparation. A government should have sufficient modesty to believe that it does not confer capacity when it confers a title..... Enthusiasm, joined to the ability to read and

write, may at a pinch suffice to make a tide-waiter, but it will not make an engineer." Neither will it make a government : if it could there would be the less need of commissions and reports.

But after all that could be effected by wise despotism of this kind, it is to the people themselves that we must look for the best part of the movement. Already they have free, or almost free, commerce with foreign nations, cheap and rapid communications internally. What is still wanting has been hinted at above ; and, for the most part, it must come from the progress of society. Early marriage, improvident expenditure, reckless borrowing at unreasonable rate of interest, and a general indifference to sound principles of agriculture, trade, and banking, these are faults that the State can do little or nothing to cure. It will not be until those habits are beginning to be corrected, that any important improvement can be hoped for in the advantages to be derived from "wealth, knowledge, and material resources."

H. G. KEENE.

ART. IX.—A PROBLEM FOR THE ECONOMISTS.

A PROBLEM which the economists must early set themselves to solve satisfactorily is, whether a nation can be civilized that possesses only one or two employments, of which agriculture is the chief ; whether that is, the mere want of diversity of occupations, to use the phrase of the famine commission, does not neutralize every other effort at good government. By the term civilized, wealth alone is not meant, but wealth fairly distributed and accompanied by a high general standard of comfort and knowledge. The problem must be solved, because it closely concerns, on the one hand, the practice of free-trade, and on the other, the whole progress of our colonial empire. It concerns the latter, in that in comparison with England the colonies must be held to be economically weak ; it concerns the former, because free-trade between one country economically weak, and another economically strong distinctly tends to limit, for a time at least, the number and prosperity of the occupations enjoyed by the weaker nation. Given then employment restricted by free-trade, can the prosperity of the community be expected to follow ? Some of the colonies have shirked this trial of strength, but enough remain loyal to free-trade to raise the question in a practical form.

Before, however, any one can say what the event of free-trade is likely to be, it is necessary to see exactly what it does, and Canada and India afford good examples of its ordinary effects. I presume here, of course, that every body knows what free-trade has come to mean, and understands that its chief principle has become a strenuous, uncompromising, and enduring competition between the industries of two countries, each with each. A duel in short to the death, in which the weakest must go to the wall. The time when it meant only cheap imports is past. The enquiry here proposed will be brief, as this is a mere outline of a vast question.

Canada, though mainly colonized by England and France, and therefore above par as regards all intellectual qualifications for success, nevertheless decided that economically she was unable to stand her ground. She was one of those countries who, as mentioned above, shirked a continued trial of strength with her competitors. Her statesmen found, or thought they found, that her industries were being destroyed, and that the capital and labour embarked in them were about to cross the St. Lawrence. Moreover, there could be no doubt that emigration, among the artizan classes, was avoiding Canada. The mechanics all went

to the States, preferring as they said to be among the undersellers rather than among the undersold. This was a very serious matter, for the Canadians were by no means prepared to do nothing but till the soil. The English blood in them rebelled against such a barren conclusion for a great people, and then came the tariff amid much grumbling and scolding from England. The effect then of free-trade upon Canada was to drive her artizans into the United States, and their capital with them. Moreover, it deprived the colony of many promising colonists. Of course, as Canada gave up the struggle and put a stop to free-trade, it is impossible to say what her condition might have been a generation hence, if she had adhered to English precept. But one cannot help thinking, that she would have been in a condition very wide, either of actual or prospective progress. The climate of Canada is one which makes agriculture not only a precarious occupation for the bulk of the people to rely on, but, moreover, an employment which could hardly employ their whole time. An uncertain harvest with no prospect afterwards of anything else to do, are just the conditions that have brought more communities to grief than any other set of known circumstances; and there is no reason to suppose that Canada would have proved an exception.

India, again, has for generations felt to the full the influence of unrestricted competition. Not only has she never enjoyed that financial independence, which has enabled Canada to save her trades (and some say herself), but also though very skilful, her people are indolent and unenterprising, and have done little or nothing to stem the torrents of cheap goods which in exchange for raw cotton and grain, England has poured into India. The consequences here have been different to what they threatened to be in Canada, because the Hindoos are a non-emigrating nation. Their religion and their prejudices are both against emigration, and leave their country they will not. It is of no use suggesting it, and for myself I cannot help admiring their dogged resistance to any attempt at separating them from their homes. As the Hindoo artizan classes were not then prepared to emigrate, they were forced, after passing through a stage of pauperism, to betake themselves to field labour, and this process is still going on with every new part of India that is opened up to foreign trade. In India, then, free-trade has practically restricted the national occupations to one—agriculture, and therefore, here also we are brought face to face with the problem which I stated at the beginning of this paper—can there be civilization, when there are only one or two employments?

That free-trade has wrecked the ancient industries of India, is not denied. On the contrary the fact is frequently taken credit

for by free-traders, because they say that the damage done is of course only temporary, and that a new and healthier industrial system will soon spring up from the debris of the old, under the invigorating influence of free-trade. At present all is agriculture, that is true, but this is only a transition state which will soon pass away, and then India will enter on a sound industrial career. If such really happens nothing could be more satisfactory, and I trust that those who really believe themselves, when they promise this, will not ascribe to any want of faith in them personally, my perservance in the task of enquiring what the actual condition of the people is, in this transition stage. Free-trade having levelled every thing to agriculture, there was of course in India, no longer any local sale for the higher kinds of agricultural produce; those I mean which are used in manufactures, and which generally speaking, are the ones which pay best. Instead of a local sale an export trade was substituted. Now a flourishing export trade, though it does not give an agricultural country more occupations, does at any rate give it more work and better earnings from its one occupation. A brisk export trade seemed at one time to be within India's grasp; and many people who had grown dubious as to the coming era of industrialism, fancied they saw in the exports a loop hole of escape from an awkward position. At all events, while the greater schemes were maturing, the exports would keep the country from starving. Considering the importance attached, therefore, to the foreign trade, it will be only right to turn aside for a moment to ascertain the extent to which it has answered the expectations formed of it.

The soils of India are of every shade and description, but roughly speaking, they may be divided into two classes, those fit to grow crops for export, and those unfit for that purpose. Success unfortunately does not always follow the same classification. Export crops are not always found to pay well. Opium, it is true, brings wealth to the district cultivating it. Rice, too, in the south and east, and wheat in the north, are fairly satisfactory crops. But cotton, the great staple of the centre and west, scarcely pays its working expenses. Moreover, it is found that wheat, from which great results were looked for, does not bear much extension. The opium* and rice markets as also those of jute, seeds, and tobacco, are of course limited. Now the cause of the destruction of the cotton trade, and of the strict limitation of that of wheat

* The unfortunate prominence of this drug in Indian economy is due to there being nothing with which to replace it. To restrict its cultivation would be not only to deprive the Government of revenue, but would be the ruin of large and populous districts in Bengal; since no satisfactory substitute could be found for the poppy.

is not far to seek. It lies in the ascendancy of America in all the raw produce markets of the world; while American cotton and wheat sell largely, the Indian products do not, the reason being that the others drive them out of the field. Into the reasons for this agricultural ascendancy of America, I need not pause to enter. It is enough here to point out that it exists, that it has already all but crushed one great Indian industry, and rigidly limited another. This one fact is quite enough to forbid any sanguine expectations being based on the exports, and itself suggests the conclusion, that a very moderate home sale would be worth them all. But for a local sale there must be home manufactures and other industries, and "there's the rub."

While then free-trade has destroyed the home markets of the Indian cultivator (the manufactures and mines of a past day); America has prevented him from obtaining any adequate share of the markets abroad. The precise effect of this double blow on the savings of an immense concourse of agriculturists is very difficult to gauge. I hesitate to ascribe to it the waste of agricultural capital so frequently deplored particularly in the exhaustion of the soil and in the refusal by the ryots of canal water in some parts of India; still more do I hesitate to attribute famine to it; yet, I doubt if I should be either logically or economically wrong, if I were boldly to make the connection in both cases. And this it is, and people must not be surprised at it, that makes so many think protection of some kind or another for the industries of India to be at least expedient, if not, scientifically necessary. It will be observed that this protection would be claimed as much in the interests of the husbandman, as of the artizan, much as he is to be pitied, a circumstance almost invariably overlooked, but which merits the closest attention. For what the cultivator evidently requires is a secure and even market for his produce; and if exports fail to give him this, he can look only to his own countrymen and his own Government for relief. What I have said about exports may help to a conclusion as to how soon this relief may be required, and of the shape which it ought to take.

I must say that the free-traders themselves, by the unfortunate excuses they advance for their system, greatly incline an unprejudiced person to take the side of the protectionists. In the case of India I mean, of course. Here is one very lame excuse. In defence of free-trade being maintained at all hazards: it is roundly asserted, that notwithstanding his precarious earnings the Hindoo cultivator benefits by the superior cheapness of the goods supplied to him from abroad. Now, when people talk like this, they betray their entire ignorance of the situation.

In the first place, supposing the Government were to guarantee manufacturing companies started with cheap capital, at say four per cent., there is no reason, that I know of, why the goods produced by these companies should not be cheaper than those imported. It is want of capital, and no lack of skill that prevents industrialism from spreading in India. Again, under the present system of precarious profits, and often no profits at all, the people are forced into the hands of money-lenders. These latter gentry, which swarm in India as part and parcel of the agricultural system, practically own the better part of the land. At any rate, everywhere except in exceptionally prosperous districts they own the crops, allowing the cultivator his food and clothing, but no more, and not always so much. If, then, any one benefits by the cheapness of these articles, it is the money-lender. It is doubtful, however, and now I am speaking chiefly of the Western Presidency, if the cultivator does not, in the long run, retaliate in increased indolence and inefficiency for all the ill usage he has suffered. In that case the sole effect of low priced imports is diminished production ! Or at any rate, if there is an addition to savings anywhere, it is not left in the pockets of the cultivator.

Lastly, I cannot bring myself to believe, that the free-traders have ever realised the existence of a people, that not only patiently submits to restriction to a single employment, and that employment agriculture, but supinely contents itself with a bare subsistence from that employment. That the Hindoos are so easily satisfied, seems to me the worst feature in the orthodox cause. It will be difficult to raise them, unless they display more ambition than this. Besides agriculture appears to be the very thing that degrades them, inasmuch as of all known occupations, it alone enables its clients to exist independently of a market. In a purely agricultural country there need be no forethought, no striving, for the husbandman can at least eat of his own production. The doubt of a recuperative force ever appearing of itself among a people dependent on agriculture alone is thus only natural. In such circumstances is spontaneous improvement to be expected, or rather is it safe to trust to it ? Must there not be powerful industrial help from without, in a word—protection ? These are the questions which, for the next generation, will perplex the brains of Indian statesmen.

So much for the purely economic effects of free-trade in restricting India to agriculture. But there are educational or moral effects as well, and they are every where visible. A great writer once said that a nation that could be told off and ticketed in types was decaying. According to him India should be far on

this backward road, for there, types everywhere dominate individuality. To describe a type in India is to describe precisely the stature, build, features, ideas, and the very innermost thoughts and aspirations of millions of individuals. Caste, too, where individuality is so systematically suppressed, has inordinate sway. Indeed, in this respect, the empire has been figured over by a chequer work of intellectual absurdity, too monstrous almost for belief. But a worse effect than either remains behind. With English rule has of course come education, and with education has come thought. But school teaching cannot make employments, though it will gain them for you if they are there. Consequently the upper class Hindoo boy has been taught to think, but yet has nothing to do. A few get good appointments under Government, but the majority have to content themselves with petty clerkships and remain entirely without any prospects of advancement. With the genius of the nation developed in this way all awry, one ceases to wonder that the educated Hindoo both thinks and writes sedition.

I think I have said enough to shew that the problem I have ventured to propose is no idle thought, but that it is a burning question, whether India will ever improve under the present system, and not only India, but any country that may be elsewhere at all similarly circumstanced. It may be too much to say that a single employment exposes a country to a perpetuation of pauperism and famine on the one hand, and to sedition on the other ; but it is not too much to say, that the system certainly exposes it to all kinds of unknown and unexpected perils. And here I would leave the matter, were it not that there is one answer which is sure to be put forward as a demurrer to any argument being allowed at all. It is that which Mr. Birdwood, C.S., wrote in his letter to the *Times* not long ago. He stated in his letter that in his opinion, and in the opinion of all persons well acquainted with India, although free-trade had no doubt destroyed native manufactures, no economical harm had thereby been done to the people. By this he meant that on the whole their earnings had increased. Now, if this were an incontestable fact there would be little more left to be said. Everything in that case might be left to time, and a good Executive Government. But Mr. Birdwood casts suspicion on his conclusion by the very example he takes to prove it. He cites the condition of the village of Indapur in the Deccan as conclusive evidence of the increased prosperity of the country. He selects Indapur because it is in the middle of a dry arid tract of land, very near, by railway, to Bombay, and therefore very sensitive to commercial competition, and he thinks that if Indapur has improved, India

generally must have done likewise. I would be quite ready to grant him his inference if I could agree with his facts. But the truth is, that it is more than doubtful whether Indapur has improved its position, economically, under British rule. I think my memory serves me fair when it tells me that Indapur was one of the Deccan villages whose people in 1874 rose up in their agony in riot against the money-lenders; and where afterwards so much agrarian misery was brought to light by the Deccan Riots' Commission.* I fear also that I am right when I say that Indapur was the very centre of the Bombay famine of 1876; and that it is always the district that causes the greatest anxiety to the Collector of Poonah, when there is any apprehension of drought.

In these circumstances, I think, that the comfort Mr. Birdwood saw around him at Indapur must be attributed rather to the people having learnt not to be afraid of displaying their goods, than to any increase either in them or in their value. In the old days for a man to show his wealth was to lose it. Now he need not fear. I am afraid this is the true explanation of the show of prosperity which so pleased Mr. Birdwood, when he thought of what he had been told of the state of the place fifty years before.

F. BEAUCLERK,
Lieutenant, R.E.

* To make their debts and current transactions with money-lenders less dangerous to the public peace, a Deccan Agriculturist's Relief Bill has since been passed. It is quite a special measure.

ART. X.—THE POLICY OF THE NEW RENT LAW FOR BENGAL AND BEHAR.

1.—*The Report of the Rent Law Commission, with the Draft of a Bill to consolidate and amend the Law of Landlord and Tenant within the Territories under the Administration of the Lieutenant-Governor of Bengal; and an Appendix containing the Proceedings of the Commission and the Papers considered and referred to in the Report and Proceedings—Calcutta, 1880.*

2.—*The Proposed New Rent Law for Bengal and Behar, by Babu Ashutosh Mookerjee—(October Number of the "Calcutta Review")—Calcutta, 1880.*

3.—*The Bengal Regulations.*

IT is no disparagement of the able and learned authors of the other papers in the October number of this *Review*, if we assert, that by far the most interesting and important was that which we have placed at the head of this article. The subject is of the utmost gravity; and the high reputation of Babu Ashutosh Mookerjee justified the belief, that distinguished ability, and literary and legal attainments of no mean order, would be brought to bear on the discussion.

We have neither leisure nor space to follow our learned author into a discussion of the details of the Bill; it is a compromise between widely divergent opinions; and many of its provisions need to be tested, very carefully, by local knowledge and experience, before they can be finally adopted as the law of the land. There is every reason to believe that the Government has not neglected, and will not neglect, this duty; but, for the present, at any rate, we do not propose to undertake it; we shall confine ourselves to a brief examination of the policy of the Bill, and especially of the truth of the assertion that it is at variance with the terms of the Permanent Settlement of 1793. In the consideration of these questions, we decline to limit ourselves to a mere discussion of the words of the Regulations, even for the purpose of ascertaining the existing law; we refuse to bandage our eyes as a preparation for travelling over a road beset with difficulties; for we hold that the Regulations are not so simple and free from ambiguity, so difficult to misunderstand, that we are at liberty to throw aside any help to their interpretation, which may be within our reach. "The Regulations" (as Mr. Mackenzie, one of the Commissioners well says*) "were not the deliberate outcome of the

* Note dated 20th January 1880.

Vide para 5.

discussions of a separate legislative assembly; but are merely resolutions of the Executive Government, which the very men who passed them, often acknowledged, in documents quite as formal, to be mistaken, or to have failed to express their meaning, or give effect to their intention." Even Mr. Field, who has set the example of looking only to the Regulations for their own interpretation, admits that * words are used in loose colloquial senses, and not with their strict legal meanings. This being so, if it is impossible to interpret the Regulations without extraneous assistance from Mr. Field's arguments or the † "beliefs" of Babu Ashutosh Mookerjee, we cannot reject the explanations of their own rules, given by the legislators, whether before, or after, the rules were passed.

And, besides mere verbal difficulties, the Regulations, though referring specially to existing conditions, omit in important instances to define those conditions; they need therefore all the light which history and records can throw upon them. These aids, which Mr. Field refused to grasp, because he thought them technically beyond his reach, and which Babu Ashutosh Mookerjee had still more cogent inducements to refuse, were not thought needless or misleading by the learned judges, who decided the "great rent case," and we are content to follow the precedent.

Accordingly, it is our purpose to begin by tracing, however briefly and inadequately, the relations between the sovereign, the cultivator, and the zemindar; we shall then endeavour to show the motives and objects with which the Permanent Settlement was undertaken, and this will lead us naturally to the settlement itself, its consequences and its bearing upon the Draft Bill; and if those of our readers, who may be well versed in these topics, are disposed to blame us for imposing upon them well known facts, and familiar arguments, we trust they will forgive us, as our object is not to instruct them, but to exhibit truth.

The germs of the land systems of India must be looked for in the Hindoo system; of this, as it existed in ancient times, we possess but few relics, and to be useful to us, these must be collated, as Mr. Phillips tells us, in his Tagore Lectures for 1875, with the results of recent enquiries in India, and with analogies drawn from similar institutions in other countries. The effect of these researches is to show, that the key to the Hindoo land system is the village community: the village lands seem to have been originally held in common by the community, but by degrees were

* The very important word "let" in Section 52 of Regulation VIII. of 1793 is said to be such a word.

† *Vide* Article, paragraph headed "Meaning of Reservation in the Cornwallis's Code."

divided, and individual rights created and recognized. Such rights appear to have existed at the time of Menu; for, though there is no direct evidence of them, there are indications of rights, which were certainly exclusive, and which can hardly have been otherwise than the property of individuals.* “Thus,” Menu says, “that sages pronounce cultivated land to be the property of him who cut away the wood, or who cleared and tilled it.”.....“The owner of a field is directed or advised to keep up sufficient hedges; he is entitled to the produce of seed sown by another in his land, unless by agreement with him; and to the produce of seed conveyed upon his land by wind or water. The case of a dispute between neighbouring landholders or villages as to boundaries is contemplated; and a penalty provided for forcible trespass upon another’s land.....The sale of lands is also spoken of in connexion with the sale of metals.” Shore † says, that “it is evident that property in land existed; and the system of taxation, as far as I can learn, was moderate. The natives, whom I have consulted on this point, affirm that the ancient rajahs exacted a sixth proportion of the produce of the lands; which the possessors were authorized to sell, or alienate, subject to the sovereign’s claim for rent.” There are no indications that the sovereign ever claimed the proprietorship of the *soil*; he claimed *a share of the produce*, varying, according to the nature of the soil, and the labour necessary to cultivate it, from one-twelfth to one-sixth, or in time of war, or other necessity, to one-fourth. In the ‡ laws of Menu, for purposes of taxation, the “clear annual increase of trees” is classified with honey, clarified butter, earthen pots, and even with articles made of leather, cane, or stone. And again it is§ said that the tax on the mercantile class, which in times of prosperity must be only a twelfth part of their crops, and a fiftieth of their personal profits, may be an eighth of their crops in time of distress, or a sixth, “which is the medium;” or even a fourth in great public adversity; but a twentieth of their gains on money and other moveables is the highest tax. Throughout we see the produce of land taxed in the same way, though not in the same degree as moveables; and there is nothing to show, that a direct proprietorship in the soil was claimed for the sovereign, while the limitation of his proportion of the produce shows that he was not proprietor; to protect his interest, however, the farmer was bound under heavy penalties to cultivate his land.

* Phillips, Tagore Lectures, pp. 4 and 5.

† Minute on the rights of zemindars and talukdars, 2nd April 1788.

‡ Laws of Menu, Ch. VII. Secs 131 and 132.

§ *Ibid*, Chap. X., Sec. 118-120.

Between the sovereign and the cultivator were officials of various grades, from the ruler of a village to the ruler of a thousand villages.

* These officers were all paid from the sovereign's share, and the surplus only of the taxes reached the Royal Treasury.

We have thus in the Hindoo times : (1) The cultivator who owned the soil, subject to payment of a share of the produce to the sovereign ; (2) The sovereign who possessed the right to a share of the produce ; (3) Officials, who for their services received portions of the sovereign's share, apportioned according to the importance of their several charges.

The early Mahomedan invasions were too partial and unstable in their effects, to enable us to fix with precision, any period at which the conquest of India can be said to have been complete ; the immediate influence on the land system seems to have been very small.

"The revenues paid by the cultivators † (says Mr. Phillips) "was similar to the 'khirāj' they (*i.e.*, the Mahomedans) would have imposed ; and the rights and obligations of the cultivators were similar to those indicated by their own law.....They did not divide the lands amongst themselves as conquerors ; perhaps they were not strong enough to do so if they had desired ; but they do not seem to have desired it. They did not impose the 'khirāj' as a new impost, but merely collected the tax already imposed, making, however, early attempts to increase its amount." The desire of the early conquerors to respect the rights of the cultivators is well exemplified in the following ‡ extract from the Institutes of Timour. "I ordained that in every country that should be subdued (to the inhabitants of which charters of safety and security should be granted) the produce and the revenue of that country should be inspected. If the subjects were satisfied with the old and established taxes, those taxes should be confirmed, agreeably to the wishes of the subjects ; or, if not, that they should be determined according to the Regulation. And I ordained that the duties should be determined in proportion to the produce of the cultivated lands ; and that the taxes on the produce of those lands should be affixed and ascertained." The whole passage, which we have not space to quote at length, is conceived in the same spirit, but there is one paragraph so much to our purpose, that it must not be omitted : "Waste lands of which there is no owner shall be brought into cultivation by the 'Khalsa' or Ex-

* Menu, Chap. VII., Sec. 118-119.

† Tagore Lectures, p. 53.

‡ *Vide* Note on p. 231 of "Harrington's Analysis," Vol. III.

"chequer; and if there be an owner, and he be distressed, the due means of holding possession shall be furnished to him, that he may cultivate his own lands."

Referring to this passage, Shore says that there is reason to believe that the principle declared, was never literally and strictly applied in practice in Bengal, but in the next sentence he admits the existence of traces of it in Purnea.

The conclusion, to which we have come is, that no attempts appear to have been made in the Mahomedan times, to alter the status of the cultivator, except as regards the proportion of the produce paid to the State; and there is no reason to believe that his tenure was less certain than it was before.

The Mahomedan theory was, that the payment of a definite rent (the system which has prevailed for centuries in Bengal) gave the cultivator an exclusive proprietary right in the soil. Whether this theory was ever perfectly carried into practice or not, cannot be ascertained; but it must certainly have had a powerful tendency to prevent any interference with the rights of the cultivators.

The growth and development of the official collecting agency of the Hindoos into the "zemindars" of the later Mahomedan times is a topic too large to be treated here; this much is certain, they never were "proprietors of the soil," beyond the very small portions allotted to their separate use. As regards the rest of the lands, they were merely intermediate agents; and though they usually succeeded to their offices by inheritance, they were proprietors of merely the right to intercept their assigned proportion of the State's share in the produce.

That the zemindars were only officials appear evident from the following considerations:—

(1)* All the settlements, from that of Todar Mull downwards, dealt primarily with the individual ryot, and fixed by an Act of State, the payments to be made by him; (2) The profits of the zemindar were derived, partly from lands granted to him on account of official services, and partly from a definite share of, or commission upon, the revenue collected from the ryots; (3) The commission received by the zemindar did not exceed 5 per cent. of the gross produce of the soil—a very small proportion certainly for a proprietor to receive, but enough for a collector of revenue; (4) The zemindar was required to discharge other official duties, which certainly are not incidents of the ownership of land. He was responsible for police, the administration of justice, the collection of transit

* *Vide* Sir George (then Mr. Justice) rent case." Campbell's judgment in the "great

duties, the preservation of roads and bridges, and sometimes for the discharge of military functions; (5) The zemindary was hereditary, and this alone is sufficient to show that it was an office; since, under both the Hindoo and the Mahomedan law, lands are equally divided among the children; (6) Zemindars were liable to dismissal. I do not here allude only to their wholesale dismissal by Jaffier Khan, which, however, would have been all but impossible had they been owners of the soil. As a matter of fact, the zemindaries of Dinagepore, Nuddea, Burdwan and Rajshahye * are all of recent creation, or have been greatly extended out of the holdings of dispossessed zemindars; (7) Zemindars were *appointed*, and even hereditary successors received sunnuds; these were asked for by petition, and granted on express conditions, among which promises to conciliate and protect the ryots, to discharge year by year, the due rents, after receiving credit for their own allowances, to refrain from the exaction of prohibited cesses, and to deliver the official village accounts, are some of those which more immediately concern our present purpose; † (8) Incompetent zemindars were excluded; (9) Zemindars were not transferred as of right without the sanction of the State; (10) Cannongoes and putwaries were appointed to keep the village accounts for the protection of the ryots, and to be a check on the zemindars.

Though it is plain from the above facts that the zemindar was not the owner of the soil, it is none the less to be conceded, that the ryots were being gradually reduced to a position, less desirable than that which they had previously held. Without losing their right of occupancy, they were required to pay taxes increasing in amount, till the original assessments were enormously exceeded. These taxes, or abwabs, were partly the result of the enhanced demands of the State on the zemindars, and partly the private exactions of these officers for their own benefit.

The following statement, which is abstracted from the progressive account of the settlements of Bengal from 1582 to 1763, given in an Appendix to Shore's Minute of June 1789, will show the increase which was due to the enhanced demands of the State.

* "The zemindar of Rajshahye, the second in rank in Bengal, and yielding an annual revenue of about 25 lakhs of rupees, has risen to its present magnitude during the course of the last eighty years, by accumulating the property of a great number of dispossessed zemindars; although the ancestors of the present possessor had not, by inheritance, a right to

the property of a single village within the zemindary."

Warrren Hastings' "Review" of the state of Bengal, 1786.

† Translation of a zemindary sunnud granted to the zemindar of Rajshahye in the reign of Mohammad Shah, A.D. 1735, *vide* "Harington's Analysis," Vol. III, p. 279.

Todar Mull's settlement in 1582, Rs. 1,06,93,152. Sultan Sujah's settlement in 1658, Rs. 1,31,15,907.* Jaffur Khan's settlement in 1722, Rs. 1,42,88,186; Sujah Khan's settlement in 1728, Rs. 1,42,45,561. Cossim Alli Khan's settlement in 1763, † Rs. 2,56,24,223.

Probably the ryots did not suffer very greatly from the additional demands of the State, till nearly a quarter of the eighteenth century had passed, since these enhanced demands were compensated by a rise in prices, caused by great increase of foreign trade ‡ and the discovery of America, whose wealth of silver was poured into India in exchange for commodities. But these cesses, though not troublesome in themselves, became so, through the action of the zemindars, who used them as pretexts and as precedents for their own profits. The Revenue History of Bengal is the history of constant ineffectual struggles on the part of the sovereign to compel the zemindars to desist from these exactions.

At the time of the Company's accession to the Dewanny then, we find that the ryots had not lost their right of occupancy, but that the zemindars had encroached on their profits; we have no means of accurately stating the extent of this encroachment, but it is probably not too much to conjecture, that the assessments of Todar Mull were fully doubled. But it is a singular and highly significant fact, that, for every one of the abwabs, some distinct pretext was alleged; and that the "assul," or principal, rent, fixed by Todar Mull, was specified clearly as *the rent*. In the ryot's accounts the "assul" was first charged, and then the several abwabs in certain proportions. "This circuitous mode of increasing the payments assuredly would not have been resorted to, if there had been an acknowledged right in the landlord to increase the rent. Its adoption is a proof, that there was once an effective limitation, a real customary rent; and that the understood right of the ryot to the land, so long as he paid rent according to custom, was at some time or other more than nominal." And as abwabs were added in this manner since the settlement of Todar Mull, it follows that the "some time or other," of which Mr. Mill speaks, is more recent, and no doubt much more recent, than the date of that settlement. § On its accession to the Dewanny in 1765, the Company at first relied entirely on native agency for the collection of its revenue; but in 1769 super-

* Of the increase, Rs. 14,35,593 arose from annexations of territory.

† It does not appear, however, that this amount was ever realised.

‡ Vide "Grant's Analysis" of the

Finances of Bengal. It will be remembered that in Bengal money rents prevailed.

§ J. S. Mill. "Political Economy," Book II, Ch. IV, Sec. 2.

visors were appointed to make minute enquiries into the condition of the lands and the revenues, as well as to superintend the work of the native officers. How fully the Government appreciated the position of the ryots, and how determined it was to protect him, will appear from the following quotations from the orders appointing the supervisors :—

“ A third and equally important object of your attention under this head is to fix the amount of what the zemindar receives from the ryots as his income or emolument, wherein they greatly exceed the bounds of moderation, taking advantage of the personal attachment of their people, and of the inefficiency of the present restrictions upon them.....When the sum of the produce of the land and of each demand on the tenant is thus ascertained with certainty, the proportion of what remains to him for the support of his family and encouragement of his industry will clearly appear, and lead us to the reality of his condition.”

“ Among the chief efforts which are hoped for from your residence in that province, and which ought to employ and never wander from your attention, are to convince the ryot that you will stand between him and the hand of oppression, that you will be his refuge and the redresser of his wrongs ; that the calamities he has already suffered have sprung from an intermediate cause, and were neither known nor permitted by us ; that honest and direct applications to you will never fail producing speedy and equitable decisions ; that, after supplying the legal due of Government, he may be secured in the enjoyment of the zemindar ; and finally teach him a veneration and affection for the humane maxims of our Government.” In another place it is said that the ryot should be impressed in the most forcible and convincing manner, that the tendency of your measures is to his ease and relief ; that every opposition to them is riveting his own chains, and confirming his servitude and dependence on his oppressors ; that our object is not increase of rents, or accumulation of demands, but solely by fixing such as are legal, explaining and abolishing such as are fraudulent and unauthorized, not only to redress his present grievances, but to secure him from all further invasions of his property.” The “ grievances” of the ryots are thus described :—“ The truth cannot be doubted that the poor and industrious tenant is taxed by his zemindar or collector for every extravagance that avarice, ambition, pride, vanity or intemperance may lead him, over and above what is generally deemed the established rent of his lands. If he is to be married, a child born, honors conferred, luxury indulged, and nuzzuranas or fines exacted even for his own misconduct—all must be paid by the ryot. And what heightens the distressful scene, the more opulent

"who can better obtain redress for imposition, escape, while the weaker are obliged to submit."

In 1772 the Land Revenue was farmed for five years, and the farmers were bound under penalties not to receive "on any pretence whatsoever" larger rents from the ryots than the stipulated amount of the pottah; they were also bound to impose no sort of abwab or tax on the ryots, and abwabs of recent institution were to be carefully scrutinized, with the view of abolishing any which might be found "oppressive and pernicious."

In 1776 the Governor-General (Warren Hastings) appointed a temporary Committee for the purpose of making detailed enquiries into the real value of the land. Beside the immediate duty of the Committee, it was* suggested that many other points of enquiry would also be useful "to secure to the ryots the perpetual and undisturbed possession of their lands, and to guard them against arbitrary exactions. This is not to be done by proclamations and edicts, nor by indulgences to the zemindars and farmers. The former will not be obeyed, unless enforced by regulations so framed as to produce their own effect, without requiring the hand of Government to interpose its support; and the latter, though it may feed the luxury of the zemindars, or the rapacity of the farmers, will prove no relief to the cultivator, whose welfare ought to be the immediate and primary care of Government....It is the interest of the zemindar to exact the greatest rent he can from the ryots; and it is as much against his interest to fix the deeds by which the ryots hold their lands and pay their rents, to certain bounds and defences against his own authority. *The foundation of such a work must be laid by Government itself.*"

Though Sir Philip Francis vehemently opposed the Governor-General in the matter of the appointment of this Committee, even he admitted † that "the idea of guarding the ryots against arbitrary exaction is just and attainable."

Mr. Barwell ‡ said, "I deem it to be the first object of this Government to fence and secure the ryots against the arbitrary power of the zemindars; otherwise no one Regulation we may resolve on can, in its immediate or remote consequences, answer the beneficent design for which it was formed. The wealth of every country is to be found in the wealth of the commonalty alone.....I acknowledge the task is extremely difficult and arduous; but unless the rights of the common people are well

* Bengal Revenue Consultations, November 1st 1776. *Vide* Bengal Revenue Selections, Vol. I, p. 436.

† *Vide* Revenue Selection, Vol. I, p. 440.

‡ *Ibid*, p. 444.

"defined and well-secured, I am persuaded that all our speculations will only tend to enrich the zemindars."

Again, in his * reply to Sir Philip Francis, the Governor-General insists on the necessity of securing the ryots in the "perpetual" and undisturbed possession of their lands, and to guard them "against arbitrary taxations," and though he says, he did not mean, by the terms "perpetual possession," and "their land," to convey the idea of any "positive or exclusive right of possession, he declines to attempt to account for the distinctions of property as they are understood in this country;" and maintains that, "while the ryot pays his rent, the zemindar has no right to dispossess him; nor can the zemindar, by any legal right, exact a higher rent from him than his † pottah prescribes."

In appointing Mr. James Grant as Sherishtadar in 1786, the Governor-General desired to obtain the means of reverting to the ancient revenue system, which was ‡ "formed, so as to protect the people who paid it from oppression, and secure to the sovereign his full and legal rights."

§ Whatever changes took place in the system of administration, and whoever were charged with the duty of carrying them out, it was never forgotten that the ryots had rights of a permanent and valuable nature; and that, so far as these rights had been invaded, it was the business of the Government to protect them. It is true that an idea arose in the minds of some of the chief authorities, reasoning from || the analogies of the English land system, that the zemindars were proprietors; but "it does not appear" (to use Mr. O'Kinealy's words) ¶ "that Government ever intended, when it recognized and settled with the zemindar as 'proprietor,' to deprive the ryot of the perpetual and undisturbed possession of his lands, or the enjoyment of the remainder of his produce, after he had satisfied the Government demand. They who are acquainted with the papers of those times, will remember, that opinions underwent many and marked changes, as to the persons who should be considered the real owners, whether the ryot, the zemindar, or the State; but from the time when the zemindar was

* Revenue Selections, Vol. I. pp. 450-452.

† It may here be noted that a pottah is not necessarily the origin of a tenancy, but it is the record of it: consequently the renewal of a pottah does not necessarily create a fresh holding.

‡ Governor-General's Minute of 4th July 1786.

§ The different settlements are

traced in Mr. Phillip's Tagore Lectures (No. VII); it is not necessary to our purpose to consider them in detail.

|| Even in our own day, we find the present Chief Justice admitting the probability that he may be influenced rather too much by his English experiences. (Minute, dated 8th January 1880).

¶ Note, dated 16th June 1880.

treated as proprietor, both zemindars and farmers were prohibited from arbitrarily dispossessing the ryots."

We now come to the discussions which were preliminary to the Permanent Settlement. The authority on which the Permanent Settlement was based is the Statute 24, Geo. III, chap. 25. Section 39 of this Act laid down, that orders should be given "for settling and establishing upon principles of moderation and justice, according to the laws and constitution of India, the permanent rules by which the tributes, rents, and services of the rajahs, zemindars, polygars, talukdars, and other native landholders, should be in future rendered and paid." The Court of Directors, in a letter to the Government of Bengal, dated 12th April 1786, issued the orders required by the Statute just quoted; they said that they apprehended the design of the Legislature to be, only to declare general principles for the regulation of the conduct of the Government to the natives, "not to introduce any novel system, or to destroy those rules and maxims which prevailed in the well-regulated periods of the native princes, an adherence to which must be most satisfactory to the natives, and most conducive to the security of our dominion." It was therefore the intention of the Directors, that the jumma now to be formed should, as soon as it could have received their approval and satisfaction, be considered as the "permanent and unalterable revenue" of their territorial possessions in Bengal; "so that" (to use these words) "no discretion may be exercised by our servants abroad in any case, and not even by us, unless in some urgent and peculiar case, of introducing any alteration whatsoever." In another passage, however, the word "permanent" is used in the sense of "either perpetuity or *a long term of years*."

Lord Cornwallis, who arrived in India with the above despatch, speedily took measures for carrying out the orders contained in it, and set on foot the enquiries which were the basis of the Permanent Settlement. Collectors were appointed, and Regulations were passed directing their conduct. Early in 1790 rules for a decennial settlement were passed; this settlement was intended to be preparatory to a Permanent Settlement, of which the jumma was to be "fixed for ever." But this determination was not arrived at, till after a prolonged discussion between Lord Cornwallis and Mr. Shore, the minutes of which constitute, perhaps, the most valuable part of our "State-literature" on revenue matters. On one main point there was no difference of opinion between them; the settlement was to be made with the zemindars. Mr. Shore from the first held a very strong opinion (which must never be forgotten in considering his writings) that the zemindars were the proprietors of the soil—an opinion, which so far as we have

seen he never justified. Lord Cornwallis * held that the question whether zemindars were proprietors of the soil or merely officers of Government was "very uninteresting to them, whilst their claim to a certain percentage upon the rents of their lands has been admitted and the right of the Government to fix the amount of those rents at its own discretion, has never been denied or disputed;" in other words, this was a mere question of names. He thought, however, that † the zemindar had the best right to obtain a vested interest in the soil, but was persuaded that, in any case, nothing "could be so ruinous as that the land should be retained as the property of Government," and was "also convinced that, failing the claim of right of the zemindars, it would be necessary for the public good to grant a right of property in the soil to them, or to persons of other descriptions. Lord Cornwallis looked upon this as the most effectual mode for promoting the general improvement of the tenantry, which he regarded as the most important object for our present consideration."

The Governor-General taking a sanguine view, and unwilling to defer the benefits which he expected, considered the country ripe for a Permanent Settlement; and held that there was no hope that Government would at any future date be in a better position to make one. Shore, on the other hand, ‡ holding that "the confirmation of a perpetual assessment is a very serious consideration," feeling the difficulty of establishing regulations which, in their progressive operation, should count the various existing abuses, and desiring experience of the actual working of the regulations which were to be established, opposed the Permanent Settlement, and preferred a settlement for ten years. We shall not go further into the points of difference between the two disputants, but it is necessary that we quote enough from their writings to show what was intended, on behalf of the ryots, by these two great authors of the Permanent Settlement.

"We know from experience" (§ says Mr. Shore,) "what the zemindars are; and I am not inclined, in opposition to that experience, to suppose that they will at once assume new principles of action, and become economical landlords and prudent trustees of the public interests. The necessity of some interposition between the zemindars and their tenants is absolute; and Government interferes by establishing regulations for the conduct of the zemindars, which they are to execute, and by delegating authority

* Minute, dated 3rd February 1790. Fifth Report, Vol. I, p. 620.

† Minute of Lord Cornwallis of 18th September 1789, Fifth Report, Vol. 1, p. 591.

‡ Mr. Shore's Minute, dated 18th September 1789. Fifth Report, Vol. 1, pp. 597 and 598.

§ Minute of Mr. Shore, dated 8th December 1789, para. 12, *et seq.*

to the collectors, to enforce their execution. If the assessment of the zemindaries were unalterably fixed, and the proprietors were left to make their own arrangements with the ryots, without any restrictions, injunctions, or limitations, which indeed is a result of the fundamental principle, the present confusion would never be adjusted." From this he proceeds to argue, that to establish these regulations after the Permanent Settlement would be to invade the proprietary rights to be bestowed on the zemindars; and consequently he would postpone the bestowal of these rights till the regulations had been passed.

In reply to Mr. Shore's Minute the Governor-General* wrote as follows:—"In order to simplify the demand of the landholder upon the ryots or cultivators of the soil, we must begin with fixing the demand of Government upon the former I agree with Mr. Shore that some interference on the part of Government is undoubtedly necessary for effecting an adjustment of the demands of the zemindars upon the ryots; nor do I conceive that the former will take alarm at the reservation of this right of interference, when convinced that Government can have no interest in exercising it but for the purposes of public justice. Were the Government itself to be a party in the cause, they might have some grounds for apprehending the results of its decisions."

"Mr. Shore observes, that this interference is inconsistent with proprietary right; that it is an encroachment upon it to prohibit a landlord from imposing taxes upon his tenant; for it is saying to him that he shall not raise the rents of his estates; and that, if the land is the zemindar's, it will only be partially his property, whilst we prescribe the quantum which he is to collect, or the mode by which the adjustment is to take place between the parties concerned."

"If Mr. Shore means, that, after having declared the zemindar proprietor of the soil, in order to be consistent, we have no right to prevent his imposing new abwabs, or taxes, on the lands in cultivation, I must differ with him in opinion, unless we suppose the ryots to be absolute slaves of the zemindars; every beegah of land, possessed by them, must have been cultivated under an express or implied agreement that a certain sum should be paid for each beegah of produce, and no more. Every abwab, or tax, imposed by the zemindar over and above that sum, is not only a breach of that agreement, but a direct violation of the established laws of the country. The cultivator, therefore, has in such case an undoubted right to apply to Government for the protec-

† Minute of the Governor-General, port, p. 613.
dated 3rd February 1790. Fifth Re-

tion of his property ; and Government is at all times bound to afford him redress. I do not hesitate therefore to give it as my opinion, that the zemindars neither now, nor ever could, possess a right to impose taxes or abwabs upon the ryots ; and if from the confusions which prevailed towards the close of the Moghul Government, or neglect, or want of information, since we have had the possession of the country, new abwabs have been imposed by the zemindars or farmers ; that Government has an undoubted right to abolish such as an oppression, and such as have never been confirmed by a competent authority, and to establish such regulations as may prevent the practice of like abuses in future."

"Neither is the privilege which the ryots in many parts of Bengal enjoy, of holding possession of the spots which they cultivate, so long as they pay the revenue assessed upon them, by any means incompatible with the proprietary rights of the zemindars. Whoever cultivates the land, the zemindars can receive no more than the established rent, which in most places is fully equal to what the cultivator can afford to pay. To prevent him to dispossess our cultivator, for the sole purpose of giving the land to another, would be vesting him with a power to commit a wanton act of oppression from which he could derive no benefit. "Neither is prohibiting the landholder to improve new abwabs or taxes on the lands in cultivation, tantamount to saying to him that he shall not raise the rents of his estates. The rents of an estate are not to be raised by the imposition of new abwabs or taxes on every beegah of land in cultivation ; on the contrary they will, in the end, be lowered by such impositions ; for when the rate of assessment becomes so oppressive as not to leave the ryot a sufficient share of the produce for the maintenance of his family, and the expenses of cultivation, he must at length* desert the land. *No zemindar claims a right to impose new taxes on the land in cultivation, although it is obvious that they have clandestinely levied them, when pressed to answer demands upon themselves ; and that these taxes have, from various causes, been perpetuated to the ultimate detriment of the proprietor who imposed them. The rents of an estate can only be raised by inducing the ryots to cultivate more valuable articles of produce, and to clear the extensive tracts of waste land which are to be found in almost every zemindary in Bengal.....* "With regard to the rates at which landed property transferred by public sale in liquidation of arrears, and it may be added, by private sale or gift, are to be assessed ; I conceive that the

* Our readers may here be reminded of the emigration of ryots from North Behar into Nepal.

“new proprietor has a right to collect no more than what his predecessor was legally entitled to, for the act of transfer certainly gives no sanction to illegal impositions.”

In his* Minute, dated 18th September 1789, Lord Cornwallis writes :—“I understand the word *permanency to extend to the jumma only and not to the details of the settlement* ; for many regulations will certainly be hereafter necessary, for the further security of the ryots in particular, and even of those talukdars, who, to my concern, must still remain in some degree of dependence on the zemindars ; *but these can only be made by Government as abuses occur* ; and I will venture to assert that either now, or ten years hence, or at any given period, it is impossible for human wisdom and foresight to form any plan that will not require such attention and regulation.”

“I cannot, however, admit that such regulations can in any degree affect the rights which it is now proposed to confirm to the zemindar, for I never will allow, that in any country, Government can be said to invade the rights of his subject, when they only require for the benefit of the State that he shall accept of a reasonable equivalent for the surrender of a real or supposed right which in his hands is detrimental to the general interest of the public ; or when they prevent his committing cruel oppressions upon his neighbours, or upon his own dependents.” Besides the above expression of opinion, which in view of their importance, we make no apology for quoting at length, we have the following † orders from the Court of Directors :—“We therefore wish to have it distinctly understood, that while we confirm to the landholders the possession of the districts which they now hold, and subject only to the rent now settled, and while we disclaim any interference with respect to the situation of the ryots, or the sums paid by them, *with any view to any addition of revenue to ourselves*, we expressly reserve the right, which clearly belongs to us as sovereigns, of interposing our authority in making from time to time all such regulations as may be necessary to prevent the ryots being improperly disturbed in their possessions, or loaded with unwarrantable exactions. A power exercised for the purposes, we have mentioned, and which has no view to our own interests, except as they are connected with the general industry and prosperity of the country, can be no object of jealousy to the landholders, and instead of diminishing, will ultimately enhance the value of their proprietary rights.”

“Our interposition, where it is necessary, seems also to be

* Fifth Report, Vol. 1, p. 591. 1792. Zemindary Settlement of Bengal, Vol. 1, App. IV., p. 78.
† Letter dated 19th September,

"clearly consistent with the practice of the Moghul Government, "under which it appeared to be a general maxim that the immediate cultivator of the soil, duly paying his rent, should not be "dispossessed of the land he occupied. *This necessarily supposes "that there were some measures and limits by which the rent "could be defined, and that it was not left to the arbitrary "determination of the zemindar, for otherwise such a rule "would be nugatory*: and in point of fact, the original amount "seems to have been annually ascertained and fixed by the "act of the sovereign." "With * a view then to promote the "future ease and happiness of the people," the proclamations were issued, which embodied the Permanent Settlement.

† The theory of the Permanent Settlement, as expounded by Babu Ashutosh Mookerjee on behalf of the zemindars, seems to be something of this sort:—The zemindars were not the proprietors of the soil, but it appeared to the Government convenient that they should become proprietors of the soil; as an inducement to agree to this arrangement, the Government offered to make the assessments permanent; the zemindars, who were free to enter into the contract or not, as they pleased, consented, to discharge regularly the revenue in all seasons, without any reference to drought, inundation, or other calamity of season, and to come under the heavy responsibility of making good, by the sale of any of their real and personal property, any deficiency of revenue which might remain due after the sale of the estate which might have fallen into arrears. The Permanent Settlement is thus a solemn written contract between the State and the landholders—as much a contract as the Promissory Note of the Secretary of State for India—and it was a contract with valuable consideration. The great majority, relying on the honour of an English nobleman, and of England, and moved by the magic of property and perpetuity, entered into the engagement; but many, considering its terms intelligible, and the pecuniary responsibilities excessively onerous, declined. The Government, however, "prepared for this contingency forced upon the recusants an allowance in consideration of their proprietary rights"—rights conferred, as the Reviewer states, by the agreement into which these persons refused to enter. With what motive this allowance was given does not appear.

With this theory we can in no wise concur. We have shown that the zemindars were originally officers of Government, checked and supervised by other agencies; as these agencies declined, the

* *Vide* Article heading I. Permanent Settlement. We have for the most part, used the writer's own

words, and hope that we have exactly represented his views.

† Regulation I of 1793, Sec. VII.

zemindars began to attain a position, something like that of contractors for the revenue; and by degrees they gathered power till, in the early times of English administration, they were deemed by persons reasoning from English analogies to be proprietors of the soil; their proprietary rights, however, being limited by the demand of the State on the one hand, and the rights of the cultivators on the other, they were not created by the Regulations, "proprietors of the soil," but* were "formally declared" for the first time to be so, though in many public documents, extending over many years, they had been spoken of under that title.

When Babu Ashutosh Mookerjee speaks of the "heavy responsibility" the zemindars *came under* at the Permanent Settlement, he has, for the moment, forgotten the means which had previously been adopted for the realization of arrears of revenue. Under the native rule, not only were they dispossessed without scruple, but they were liable to severe personal inflictions. The following were some of the expedients resorted to by Jaffur Khan and Nazir Ahmed, his zealous servant: †—"He used to suspend the "zemindars by the heels; and after rubbing the soles of their feet "with a hard brick, bastinado them with a switch. In the winter "he would order them to be stripped naked, and then sprinkled "with water; and he used also to have them flogged, till they "consented to pay the money; Moorshed Kuly Khan employed "none but Bengali Hindoos in the collection of the revenues; "because they are most easily compelled by punishment to discover their malpractices; and nothing is to be apprehended from "their pusillanimity. When he discovered that an aumil, or "zemindar, had dissipated the revenues and then, falling in "balance, was unable to make good the deficiency, he compelled "the offender, his wife, and children to turn Mahomedans."

These, no doubt, were exceptional measures, and have given an odious notoriety to Jaffur's rule; but it is not unfair to quote them, since at the date of the Permanent Settlement they could scarcely have passed out of the memory of persons still living; and moreover many zemindaries, existing at that date, owed their origin, or at least great increments, to the re-distributions of that despotic ruler.

If, however, we confine our attention to the policy of our own Government, we find that before the settlement, free alienation was not allowed, but that ‡ "sale for arrears was introduced as an "ordinary remedy, in addition to eviction, imprisonment, and "attachment of the land and goods." There is therefore no pre-

* Preamble to Regulation II. of p. 273.

1793.

† Phillip's Tagore Lectures for

‡ "Harington's Analysis," Vol. III, 1875, p. 270.

text for saying that by the settlement the zemindars "came under" any new "heavy responsibility" for arrears.

The truth is, that the Permanent Settlement was not a contract, but an act of State performed by the local Government, and approved by the Court of Directors under the general directions of an Act of Parliament. There is no sort of analogy between it and a promissory note; the zemindars were not free to contract, and they were not asked to contract. The recusancy of the whole body would not have prevented it, as recusancy of a few did not prevent its application to their States. On the contract theory, it is impossible to account for the treatment by the Government of disqualified and recusant proprietors; the former could not, and the latter would not, contract; and yet we see that the Government made allowances for both. This becomes intelligible, if the true nature of the transaction be understood; the State said in effect to the "proprietors," we have determined to make a Permanent Settlement; you may manage your estates if you can, and will; if you cannot, or will not, we will make other arrangements for the management; but as we acknowledge you to possess proprietary rights, we will provide for your support from the profits.

We have shown above, that the Act of Parliament on which the settlement was based directed only the establishment of *permanent rules*; the Court of Directors, in a passage already quoted, desired that the settlement should be fixed, "so that no discretion may be exercised by our servants abroad in any case, and *not even by us, unless in some urgent and peculiar case, of introducing any alteration whatever.*" A discretion was thus reserved to the Court of Directors, and accordingly we find in * Article VI. of the Proclamation, that the orders were considered as "fixing the amount of the assessment as irrevocable, and not liable to alteration by any persons whom the Court of Directors may hereafter appoint to the Administration of their affairs in this country" And again, in the preamble to Regulation II, we see it laid down that "no power will then exist in the country by which the rights vested in the landholders by the Regulations can be infringed, &c." The intention appears to have been that only the Government of India should be absolutely bound; and Lord Cornwallis, acting under the orders of the Court of Directors, had evidently power to bind his successors, though he had not power to bind the Court, and still less to bind Parliament. These considerations prove conclusively, if proof be required, that the settlement was not a contract, but an act of State done under the authority of the supreme power. And here we may remark that, even if it had been an act

* Section VII of Regulation 1 of 1793.

done by the supreme power itself, it would not have been irrevocable. "The laws" * (says Austin) "which sovereigns affect to impose upon themselves, or the laws which sovereigns affect to impose upon their followers are merely principles or maxims which they adopt as guides, or which they commend as guides to their successors in sovereign power. A departure by a sovereign or State from a law of the kind in question is not illegal. If a law, which it sets to its subjects, conflict with a law of the kind, the former is legally valid, or legally binding." At the very best then, the Permanent Settlement stands on the basis above indicated, and, if ever the welfare of the country should require its abrogation, may and ought to be abrogated without hesitation on just and equitable conditions: but we think there is no present necessity for its abrogation, nor do we propose such a measure. We will now endeavour to shew briefly what the settlement of 1793 really was:—

(1) The zemindars and talukdars, who had for many years been frequently spoken of in State-papers as "actual proprietors of the soil," were now for the first time formally declared to be rightly so-called.

(2) The assessments were made permanent, and the increase of the State share of the produce, whether arising from the extension or from the improvement of cultivation was given to these proprietors.

(3) The zemindar's rights were made alienable without the consent of Government.

(4) The zemindar received the power in certain cases of cancelling leases.

(5) Many restrictions were imposed upon the zemindars of which the most important for our present purpose is the provision under which the Governor-General in Council reserved the right to exact Regulations protecting the dependent talukdars, ryots, and other cultivators of the soil.

We now enter upon the discussion of the important questions:—What was meant by the terms "actual proprietor of the soil," and what was the nature of the power which was reserved for the protection of the ryots?

Our readers need hardly be reminded that, from the earliest times down to the Permanent Settlement, there were two great parties directly interested in the land, *viz.*, the cultivators and the State; we have shown from the remotest periods of which we have record to the latest, that for the collection of the State dues, the State employed agents who were paid from those dues, while the cultivators enjoyed the lands; and we have shown that the

State was entitled by * the "ancient law of the country to a certain proportion of the produce of every beegah of land demandable in money or kind according to local custom," while to the actual holding of the land the State made no claim. It will be remembered also, that it was Lord Cornwallis' purpose, to make over to the zemindars the rights which he deemed it undesirable for the Government to retain. It will not have been forgotten that, from the very earliest period of British rule to the time of the Settlement, the protection of the ryots, and the preservation of their rights, had been the subjects of the greatest care and attention of the statesmen and politicians of all grades and of all shades of opinion. It is now almost needless to point out, that it never was, nor could have been, the purpose of the framers of the settlement to make over to the zemindars the rights of the ryots. As in ancient days the rights of the zemindars were carved out of the rights of the State, so at the settlement, the additional benefits conferred on them were derived from the same source. The new rights of the zemindars were rights as against the Government, and not rights as against the ryots; throughout the Regulations there is not the slightest indication that the ryot's position was in the smallest degree to be affected or changed for the worse; on the contrary, there is distinct provision for their protection. Whatever was meant by the term "actual proprietor of the soil," it is quite plain that the zemindars were not "absolute proprietors" "Although the zemindars† (says the Court of Directors) with whom the "Permanent Settlement was made, are, in the Regulation respecting "that arrangement, declared to be "the actual proprietors of the "soil;" although their zemindariæ are called landed estates, and "all other holders of land are denominated their "undertenants; "and although, as we shall have occasion more particularly to "observe in the course of this dispatch, the ‡ use of these terms, "which has ever since continued current, has in practice contributed with other causes, to perplex the subject of landed tenures,

* Preamble to Regulation XIX. of 1793.

† Revenue Letter to Bengal (ceded and conquered provinces), dated 15th January 1819. (Bengal Revenue Selections, Vol. I, p. 352.)

‡ We have above attributed the use of these words to that national feeling which induces Englishmen to seek equivalents in other countries for ideas familiar to them at home; but though this tendency was plainly marked, even so early as the time of

Warren Hastings, and produced much effect not only in India but in England, it was no doubt materially strengthened by the desire of Government, that the zemindars should not be subject to the jurisdiction of the Supreme Court, as they would have been, if they had been considered mere officials. *Vide* Halhed's Memoir on the land-tenure and principles of taxation. Calcutta, 1832—quoted in the "zemindary settlement in Bengal," Vol. I, p. 129, App.

"and thereby to impair, and in many cases to destroy the rights of individuals, yet it is clear that the rights which were actually recognized to exist in that class by the enactments of the Permanent Settlement, were not intended to trench upon the rights which were possessed by the ryots." Let us turn to an authority which cannot be objected to, as "State literature," viz., the decisions of the learned judges of the High Court in the great rent case. We can afford space for only two quotations but these will suffice:—

"* As regards the legislation from 1793 down to Act X, it, in my opinion, shows clearly that the zemindar never was, and never was intended to be, the absolute proprietor of the soil. He never was proprietor in the English sense of the term, or in the sense that he could do with it as he pleased; for certain classes of ryots have at all times had rights quite inconsistent with† absolute ownership having rights which entitled them to remain in occupation so long as they paid their rents." Mr. Justice Norman observes as follows:— "These provisions appear to me to show that, although the zemindars were by the regulations constituted owners of the land, such ownership was not ‡ absolute."

* Mr. Justice Macpherson v. Bengal Law Reports. Full Bench Rulings, p. 230.

† Babu Ashutosh Mookerjee alleges that Messrs. Mackenzie and O'Kinealy "contend that nothing particular was meant by the expression 'proprietor of the soil.' They were not the first to limit its meaning.

‡ Babu Ashutosh Mookerjee discusses at some length a case quoted by Mr. O'Kinealy as showing how limited proprietary rights were; he claims a victory over Mr. O'Kinealy, who, he thinks, has been content with the imperfect information derived from "some obscure portion of State-literature." We regret that we have not at hand the reports which he quotes, that we might examine them for ourselves. But Mr. Phillips at the end of his eighth lecture (Tagore Lectures for 1875) gives us an abstract of this very case taken from the reports. The point of difference between Mr. O'Kinealy and Babu Ashutosh Mookerjee is briefly this: Mr. O'Kinealy says, that min-

ing rights, and rights over the surface of the soil were separated by the Common Law.

Babu Ashutosh Mookerjee says, that the two sets of rights were in the hands of one zemindar who separated them himself. Mr. Phillips remarks:—"The separation in this case does not seem to have originated with the zemindar, but to have been all along insisted upon by the Government; and the Permanent Settlement does not seem to have been considered to entitle the zemindar to the minerals as part of the soil for which he was settled with as actual proprietor. It is true, the settlement for the minerals had been made with the zemindar, the convenience of such a course being obvious, but the separate assessment and separate convenience of the *loha mehal* were considered sufficient to show that the *loha mehal* was held in 'a different right from the zemindary.' This exactly confirms Mr. O'Kinealy's account of the case.

We have shown that it was not the purpose of the framers of the Regulations of 1793 to surrender the ryots to the vices * and weakness of the zemindar, or to the rapacity and dishonesty of their agents. Some restrictions were imposed on the zemindars and their representation by express legislations. Existing abwabs were to be consolidated with the rents or "assul" (as it is still called) and pottahs specifying the rents, by whatever rule or custom regulated were to be given in a form to be approved of the Collector. ‡ No new abwab or cess was to be § imposed upon the ryots "under any || pretence whatever," and an offender was made liable to a penalty of three times the sum exacted. ¶ It is recommended, for the sake of the mutual convenience of the landlords and ryots, that the rents fluctuating with the kind of the produce grown, should be fixed by agreement; but, wherever the established custom was, that the rents should so fluctuate, and the parties intrusted should prefer it to continue, exact and particular written engagements were to be entered into.** Ryots might demand pottahs, and refusal was to be punishable with fine. There is no necessity for enumerating more of these provisions, which no one will venture to dispute: but there is one rule indirectly protecting the ryots, the exact meaning of which has formed the subject of controversy, and which we are bound to notice; this rule is to be found in sections 52 and 53 of Regulation VIII. of 1793. We reproduce these two sections below.††

* Of course we do not deny that there may have been then, as undoubtedly there are now, good zemindars and honest servants, but ample justification for our words is to be found in the writings of the day. "We know what the zemindars are" says Shore.

† Regulation VIII. of 1793, Sec. 54, 57 and 58

‡ *Ibid.*, Sec. 55.

§ It will be remembered that the imposition of new abwabs was the method of enhancement known to those times.

|| If the Permanent Settlement was a contract, is there a single estate in all Bengal on which this provision has not been broken?

¶ Regulation VIII. of 1793, Sec. 56.

** *Ibid.*, Sec. 56.

†† No. I.II.—The zemindar, or other actual proprietor of land, is to let the remaining lands of his zemindary or estate, under the prescribed

restrictions, in whatever manner he may think proper; but every engagement contracted with under-farmers shall be specific as to the amount and conditions of it; and all sums received by any actual proprietor of land, or any farmer of land, of whatever description, over and above what is specified in the engagement, of the persons paying the same, shall be considered as extorted, and be repaid with a penalty of double the amount. The restrictions prescribed and referred to in this section are the following:—

LIII.—No person contracting with a zemindar, independent talukdar, or other actual proprietor, or employed by him in the management of the collections, without an amilnamah, or written commission, signed by such zemindar, independent talukdar, or other actual proprietor.

At the same time we would earnestly desire our readers to refer for themselves to the four sections immediately preceding them in the Regulation.

Babu Ashutosh Mookerjee thus describes these sections : "sections 48-51 deal with the relations between the zemindar and dependent talukdars, istemrardars and moccurreydars, and immediately after, the Regulation proceeds to enact as follows".....He then quotes sections 52-60 of the Regulations, and proceeds to say :—"We must bear in mind that the remaining lands spoken of in section 52 are all the lands of the estate, save the lands in the possession of dependent talukdars, istemrardars, and moccurreydars. The plain meaning of section 52, and the next following section above cited, is this. The zemindar is to be at liberty to let the remaining lands in any manner he may think proper, subject only to the prescribed restrictions, that is to say : 1st, section 53, if he elects to let his lands in farm, the farmer shall not be authorized to collect rents from the ryots, unless he is armed with an amilnamah ; 2nd, section 54 ;" and so on, through sections 55-60, which we have already abstracted and considered as having general application ; Baboo Ashutosh Mookerjee tacks them on to section 52, and we regret that he is able to quote in his support, the high authority of Mr. Field, though for our part we have the satisfaction of knowing that Mr. O'Kinealy and Mr. Mackenzie are with us.

Babu Ashutosh Mookerjee thus takes sections 54 to 60, as connected with section 52, and as applying only to the lands which were not "in the possession of dependent talukdars, istemrardars and moccurreydars." If this be so, the ryots holding under dependent talukdars have no such protection as is afforded to the ryots holding directly of the zemindars ; what can be the reason of this extraordinary omission ? But a glance at the words of sections 54, 55, 56, 58 and 59 shows that no such omission is to be laid to the charge of the authors of the Regulation. Every one of those sections refers to transactions between dependent talukdars and the ryots ; "all proprietors of land and *dependent talukdars*" are to consolidate the abwabs with the assul ; no actual proprietor of land, or *dependent talukdar*, or farmer, is to impose new abwabs ; it is expected that in time, the proprietor of land, *dependent talukdars* and farmers of land, and the ryots will change the fluctuating into fixed rents ; every zemindar, independent talukdar, or other actual proprietor of land, and *every dependent talukdar* is to prepare a form of pottah for the collector's approval ; a ryot may demand a pottah from the actual proprietor of land, *dependent talukdar*, or farmer, and so on. We think that this argument alone is sufficient to support our contention ; but it is further borne out by

the original punctuation which connects section 52 with section 53, and not with the following sections. Moreover, in the old editions of the Regulations, and even in Clarke's (published in 1852), we find the * marginal abstract of section 53 to be, "restrictions alluded to in section 52;" this does not extend beyond section 53. On the question of punctuation, Babu Ashutosh Mookerjee professes that it is "impossible to be serious;" in our opinion the argument derived from the punctuation is of trifling weight, compared with the study of the words.

We read together sections 48 to 53, and thus interpret them. † Actual proprietors of land are to enter into engagements with dependent talukdars; such engagements will include any progressive increase which the proprietors may be entitled to demand, but ‡ mocusrydars or istemrardars of the nature of those described in section 18, are not liable to pay increased rents, if they have already held their lands for more than twelve years; increased rents are not to be demanded of those whose holdings were more recent, if the proprietor of land has bound himself not to lay any increase upon them; but this latter restriction is not to be binding on officers of Government, if the estate should be held khas, or on § farmers if it should be let in farm. Section 51 lays down rules for the prevention of undue exactions from the dependent talukdars; and section 52 authorises the zemindar to let those lands which are not included in the dependent taluks, "in whatever manner," (not, it will be observed, at *whatever rates*, or on *whatever principles*) he may think proper; if he wishes to let them to under farmers, he may do so under specific agreements; but whether he manages these lands directly by agents or farms them, he does so, subject to the restriction, that no farmer or agent shall be authorized to || take charge of the lands or collections without a written commission signed by the proprietor.

The only point, which we think can fairly be argued against us, is, that section 52 alludes to the "prescribed restrictions," whereas section 53 includes only one restriction; we think, however, that the plural may be justified, since (1) the agent, and (2) the farmer were severally forbidden to take charge without written authority; but, even if this view be incorrect, it is quite possible that the plural termination may be a mere accident, such as has happened in other

* These marginal abstracts are law, *vide* Section 8 of Regulation XLI of 1793: "The subjects of every Section and Clause shall be inserted opposite to it in the margin as concisely as possible."

† *i.e.*, zemindars, independent talukdars and others.

‡ Sec. 49 and 50 manifestly

qualify sec. 48, and are not independent.

§ By "farmer" is meant a farmer holding under Government.

|| The phrase "*take charge of the lands or collections*" shews conclusively that the letting is not to ryots.

cases. In the old edition of the Regulations now before us, we see, in the very beginning of Regulation I. of 1793—"The following *Articles of the Proclamation*"....."*is hereby enacted into a Regulation*;" such a slip may have occurred in this instance also; at any rate, we think the objection is of no weight whatever, compared with the arguments drawn from the plain meaning of the words.

If we have wearied our readers with this discussion, our plea is, that the matter has a most important bearing on the subject of enhancement.

Besides the specified restrictions on the powers of the zemindars, we have found, that the authors of the settlement reserved for themselves the right of interference, and they did so in the following terms:—* "It being the duty of the ruling power to protect all classes of people, and more particularly those, who from situation are most helpless, the Governor-General in Council will, whenever he may deem it proper, enact such Regulations as he may think necessary for the protection of the dependent talukdars, ryots, and other cultivators of the soil; and no zemindar, independent talukdar, or other actual proprietor of land, shall be entitled on this account, to make any objection to the discharge of the fixed assessment which they have respectively agreed to pay."

Babu Ashutosh Mookerjee professes to explain to us (1)—what this reservation does not mean, and (2) what it does mean. We have read his explanation; and so far as we can understand, it amounts to this—that the reservation (1) does not mean anything, and, (2) does mean nothing. The explanation of what the reservation does not mean, consists apparently of two parts; *first*, there is an assertion, † which is wholly unfounded, that the Governor-General did not reserve the right to interfere on behalf of ryots against dependent talukdars, and that therefore, the latter may justly complain of any legislative interference; *secondly*, a phrase is quoted from the preamble of Regulation II. of 1793 containing "these memorable words":—"No power will ‡ then exist in the country by which the rights vested in the landholders by the Regulations can be infringed, or the value of landed property affected." We wish to point out, that the whole question at issue is, what are "*the rights vested in the landholders by the Regulation?*"

And now let us see how we are helped by Babu Ashutosh

* Regulation I. of 1793, Sec. VIII.

† We need simply refer to the terms of the Regulation just quoted.

‡ *i.e.*, after the establishment of Courts by which questions between the public and the proprietor of land, and again between these persons and

their ryots should be tried. The object of the Regulation was to establish between the executive authority and the zemindars a tribunal, which the latter might deem impartial, and not of course to restrict future legislation.

Mookerjee to discover what the reservation does mean. He begins by a quotation which, he says, contains "the quintessence of cartloads of State-literature," and which contains statements nearly all true, but none relevant; he then parodies the Governor-General's proclamation, most ingeniously interpolating a sentence of his own:—"You shall not," he says, addressing in the person of the Governor-General the zemindars of Bengal, "*You shall not be allowed to claim any compensation for the loss of your questionable seigniorial jurisdiction, privileges and perquisites,*" and no zemindar, independent talukdar, or other proprietor of land, shall be entitled on this account to make any objection to the discharge of the fixed assessment which they have respectively agreed to pay. In a note explaining this interpolated passage, it is said that, "in pursuance of the power reserved by the proclamation, Regulation VIII. of 1793 did away with the abwabs, mhatool, and other perquisites, and the civil and criminal jurisdiction exercised by the zemindars was taken away by section 66 of that Regulation." It might be said with almost equal truth, that a man's right to steal (or "perquiste," if a more graceful term be required) was taken away by section 379 of the Penal Code! We need not again refer to the expressed intentions of Lord Cornwallis and Mr. Shore; our readers are in possession of them, and can form their own judgment. The meaning attached to the Regulations *subsequently* of the Court of Directors may be gathered from the following extracts from their* Revenue letter to Bengal, dated 15th January 1819:—

"It is also a circumstance which is not to be overlooked, that although so many years have elapsed since the conclusion of that settlement, *yet no resort has been had to the exercise of the power, we then expressly reserved, of interfering for the purpose of defining and adjusting the rights of the ryots.*"

We have now seen, that from remote antiquity, cultivators have enjoyed rights; that throughout the Mahomedan times, these rights were acknowledged; that this same policy was pursued up to the time of the Permanent Settlement; that it was the object of the authors of the settlement to make that policy perpetual, and that they framed their Regulations with that view. Why then was this design in a great measure unsuccessful? It was simply because, while the liabilities of the zemindars were ascertained and defined, those of the ryots were not; excessive and, as the event proved, unjustifiable reliance was placed in the pottah regulation; not only were exaggerated ideas entertained of its efficacy, but the Government was greatly misled as to the extent to

* Bengal Revenue Selection, Vol. I, p. 357.

which it had been carried out. Neither the zemindar nor the ryot, had at that time any strong interest in the enforcement of its provisions. The landlord disliked it, because he wished not to be bound, and scorned to bind himself to a ryot; the ryot, because he feared, that the receipt of a pottah would place his tenancy on a lower footing, and perhaps deprive him of excess lands in his cultivation. It "was of much more importance (say the Directors in 1819) for the security of the ryot, to establish what "the legitimate rates of the pergunnah were, according to the "customs of the country, or at all events to have ascertained "the rates actually existing, and to have caused a record of "them, in either case, to be carefully preserved, than merely "to enjoin the exchange of engagements between them and "the zemindars, leaving in total uncertainty the rules by "which those engagements were to be formed. It is true "that to have taken the rates at which the ryots were "actually assessed by the zemindars, at the period of the "Permanent Settlement as the maximum of future demands, "would have had the effect, as Mr. Shore observed in one of his "minutes, of confirming subsisting abuses and oppressions; but "it would, at least, have fixed a limit to them." But, though these rights were not specifically recorded, we find throughout the regulations the phrases "established pergunnah rates, establish- "ed custom, rents regulated by rule or custom, the Nirkbundy of the "pergunnah," and similar expressions. It is true, that these phrases generally applied primarily to ryots with rights of occupancy or khudkasht ryots; but these constituted by far the largest part of the ryots of Bengal; and it must never be forgotten, that at the time of the Permanent Settlement, paikasht or temporary ryots, used to pay* lower rents than those with rights of occupancy. Babu Ashutosh Mookerjee has quoted Regulation XLIV. of 1793, and has founded upon it—as read with Regulation VIII. of 1793—a theory that the zemindar is "left to let his lands in any manner he may think proper; and that *there is no limit to the rent he may demand*, except his agreement with the ryot which must always be reduced to writing; and the term of which is in no case to exceed ten years; but as regards the khudkasht ryots, *who† were at the time upon the land*, he must

* We believe that this is so still in some districts, though not in the majority. The rents of such ryots and the proportion which they bear to the rents of occupancy ryots vary very greatly now in Bengal; in the face of this fact Sir Richard Temple's

scheme for the adjustment of occupancy rents inevitably failed.

† So that, in a measure intended "to promote the future ease and happiness of the people for ever," only the rights of the existing generation were to be protected.

not cancel their pottahs, so long as they pay rents according to the pergunnah rate." We shall not return to Regulation VIII. which has already been discussed, but it is necessary and relevant to this portion of our subject, to consider shortly Regulation XLIV. The circumstances under which that Regulation was passed were these: it* was apprehended that as the public demand was now fixed, many proprietors either from improvidence, ignorance, or with a view to raise money, or from some other causes or motives, might be induced to fix at an under rate the jumma of existing dependent taluks, or might create new taluks to be held at a reduced jumma, or to let lands in farm, or grant pottahs for the cultivation of land at a reduced rent for a long term, or in perpetuity. It was held that such engagements, if permitted to be valid, would leave it in the power of weak, improvident, or ill-disposed proprietors to render their property of little or no value to their heirs; promote vice and injustice; occasion a permanent diminution of the resources of Government arising from the lands in the event of the rent or revenue reserved by such proprietors being insufficient for the discharge of the amount of the public demand upon their estates; be an abuse of the benefits conferred by the Permanent Settlement; and, moreover, be repugnant to the ancient and established usages of the country according to which the dues of Government from the landsare unalienable without its express sanction. It was, however, considered essential that proprietors of land should have a discretionary power to fix the revenue payable by their dependent talukdars; and to grant leases or fix the rents of their lands for a term sufficient to induce their dependent talukdars, under farmers, and ryots to extend and improve the cultivation of their lands. With the view, therefore, of preventing the improvidence and vice of the proprietors from being injurious to the interests of their heirs, or of the State, pottahs were not to be granted for a term exceeding ten years; and these were not to be renewed till the last year of their currency. The period of ten years was fixed so as to allow proprietors to make fair arrangements at low rates for the extension and improvement of their cultivation. It is obvious that ryots entitled to hold pottahs at fixed rates, or rates determined by fixed rules or customs, could lose nothing by this Regulation, while it gave encouragement and protection to the paikash ryots. We will now turn to Regulation IV. of 1794. We there see it† laid down, that "if a dispute shall arise between the ryots and the persons from whom they may

"be entitled to demand pottahs (whether the rent be payable in money or kind), it shall be determined in the Dewanny Adawlut of the zillah in which the lands may be situated, according to the rates established in the pergunnah for lands of the same description and quality as those respecting which the dispute may arise."

"The rules in the preceding section are to be considered applicable, not only to the pottahs which the ryots are entitled to demand in the first instance under Regulation VIII. of 1793, but also to the renewal of pottahs which may expire or become cancelled under Regulation XLIV. of 1793. And to remove all doubt regarding the rates at which the ryots shall be entitled to have such pottahs renewed, it is declared, that no proprietor or farmer of land, or any other person, shall require ryots, whose pottahs may expire or become cancelled under the last-mentioned Regulation, to take out new pottahs at higher rates than the established rates of the pergunnah for lands of the same quality and description."

These Regulations, not only do not bear out Babu Ashutosh Mookerjee's theory, but prove exactly the reverse. We have seen then that, though the Regulations asserted the rights of the ryots, both khudkasht and pakasht, they did not define those rights; nor was any comprehensive executive enquiry into them undertaken; in one or two districts, local officers by their personal energy succeeded in securing what belonged to the people, but in the province at large this was not so. The mischief thus begun was continued and increased by subsequent legislation. Not long after the Permanent Settlement, it was found that the zemindars required the assistance of some law to enable them to collect their rents. The demands of Government at that time were very heavy in proportion to the rent-rolls of the proprietors; and as realization of rents was difficult, and the sale law strict and strictly applied, the necessary result was, that the majority of the zemindaris changed hands in the course of a few years, and the revenues of the State seemed to be in danger. The zemindars were therefore invested by Regulation VII. of 1799 with powers large, and as the event proved, capable of abuse. This Regulation was followed by Regulation V. of 1812, and these two weapons, known as† "haftan" and ‡ "panjam," were placed in the hands of the zemindar. Their use has been shortly and graphically described by Mr. Buckland in his Annual Adminis-

* Including pottahs given for the extension or improvement of cultivation.

† "Seventh."

‡ "Fifth."

tration Report of the Burdwan Division for the year 1872-73 :—
 “ Under the ‘ haftan ’ process (Regulation VII. of 1799 the
 “ person of the ryot could be seized ; under the ‘ panjam ’ pro-
 “ cess (Regulation V. of 1812), his property could be distrained ;
 “ and in either case the proceedings commenced by a strong pre-
 “ sumption equivalent to a knock down blow against the ryot.”

Their is no evidence of any intention to inflict injury on the ryot ; and * probably the framers of these Regulations inherited all the benevolent sentiments towards him, which their predecessors had uttered and attempted to carry into practice : the actual result, however, was disastrous.

Clouds of witnesses are at hand to tell us what happened ; but we will not weary our readers with the record of their evidence ; we will quote but † one passage which is expressed in mild and gentle terms compared with those used by others.

“ The number of summary processes available by landholders
 “ against their tenants for various purposes is already large ; and
 “ it is a notorious fact, that they are frequently abused for the
 “ purposes of oppression and extortion. Tenants are compellable
 “ by force, used at the discretion of private individuals, to attend
 “ at the cutcherry of the zemindars to adjust the accounts of rent ;
 “ their personal and moveable property and crops are liable
 “ to distraint and sale after a mere reference to the local revenue
 “ authorities ; they are liable to be arrested, with or without pre-
 “ vious notice, by a process issued on the application of the
 “ landlord or his servants without any previous enquiry as to the
 “ necessity thereof ; they are liable to be amerced in sundry
 “ penalties on a summary investigation of complaints preferred
 “ against them. These remedies devised originally for the better
 “ realisation of the land-revenue of the country, public and pri-
 “ vate, are, it is well known, now a terror to the well-disposed
 “ part of the tenantry of the country, and have practically re-
 “ duced an immense majority of the nation to a condition con-
 “ siderably below that of freemen.” And, when to these oppres-
 “ sions, practised under colour of the law, we add the violence
 “ and extortions for which the zemindar was his own legal author-
 “ ity, who will be bold enough to say that the Government fulfilled
 “ its acknowledged duty “ to promote the ease and happiness of
 “ the people,” and “ to protect all classes, and more particularly

* This is more than “ probable,” for one of the objects of Regulation V. of 1812 was to remove the “ considerable abuses and oppressions,” which the zemindars were practising. (*Vide* Preamble to the Regulation).

† Editor of the *Hindoo Patriot* (Baboo Hurish Chunder Mookerjee), Babu Sambunath Maudit (late Judge of the High Court), and others (*vide* “ Zemindary Settlement of Bengal,” p. 274.)

“those who from situation are most helpless?” This state of things was not unknown to the Government or to its * officers; the Court of Directors in 1819 acknowledged that the power, reserved in the Regulations for the protection of the ryots, had never been used; enquiries were made from time to time, and from time to time weighty protests issued from those who knew the facts, but nothing† of importance was done until the passing of Act X. of 1859. It is not our purpose to discuss that piece of legislation at length; we do not see in it (to use Mr. Mackenzie’s phrase) a legal revelation, which “it is heresy to supplement and sacrilege to alter,” but it is unquestionable that, at least in Lower Bengal as distinguished from Behar, its operation, apart from the abolition of “haftan” and “panjam” has, on the whole, been favourable to the ryots. The right of occupancy conferred by it has done something towards placing the ryot who can get it, in the position of the khodkasht ryot of old days; but, theoretically, at least, this advantage has been marred by the provisions for enhancement, a process which we have already shewn was not acknowledged in the times before the settlement, and found no place in the Regulations. Practically, the extreme difficulty of working the enhancement provisions has been to the advantage of the ryots: but this is not satisfactory to the landlords, neither do they consider that the means given them for the realization of rents are sufficiently cheap and prompt. Consequently in some parts of Bengal, where the ryots are beginning to know the law as well as their own power in combination, there is no doubt, that their condition is improving, not so much from the excellence of the law, as from its inefficiency—an advantage to which they are not entitled. In other parts of Bengal, and above all in Behar, Act X. of 1859 has done the ryots little or no good, while it has authorised and stimulated enhancements. The zemindars are willing enough to go “behind Act X.,” and to obtain facilities for enhancing and collecting their rents; but if this request be granted them, and the settlement, (such as it is) of the relations between landlord and tenant be disturbed, the opportunity must be taken at any expense of time and labour, to revise the rent law generally; and to do so in such a manner, that while the ryots are compelled to pay the zemindars their just dues, at least, some part may be accorded to them of the protection so solemnly promised in 1793; and now let us hear what account the Rent Law Commissioners have to give of their labours:—“In the interest of the cultivating

* Colebrooke, Lisson, and many others.

† We do not of course forget Regulation VII. of 1822.

class" (they say)—"We have afforded protection from arbitray and "excessive enhancement of rents. We have defined the incidents "of a right of occupancy, and have made it a valuable property "in the hands of a careful tenant. We have provided reasonable "instalments of rent, and secured the evidence of payment. We "have restrained the harassment of honest tenants, when their "landlords are co-parceners, and cannot agree. We have given the "evicted tenant the crop on the ground sown by himself, and "have allowed him compensation for any improvements which "he may have made ; and finally we have endeavoured to raise "the standard of comfort by allowing the ryot to build himself "a comfortable habitation, and by giving him some share in the "material progress of his country. In the interest of the land- "lord, we have provided rules for the registration of tenures, "under-tenures, and occupancy holdings—we have allowed the ten- "ant to be ejected, who * disclaims his landlord's title, a valuable "sanction in a country when the person who sets up a hostile one, "too often hopes to support it by suborning to his side the tenants "of the person in possession—we have provided definite rules for "the enhancement of the rents of tenure-holders and under tenure- "holders—and for the purpose of the reasonable enhancement of "ryots' rents, we have placed the executive agency of Government "at the disposal of the zemindar, and have put him in as good a "position as Government itself for the achievement of this object. "Finally, we have provided the auction-purchaser, who represents "an important landholding interest in this country, with the means "of realizing the profit of capital invested in land. Well, indeed "may the Commissioners say, that the advantages offered by the "Bill to landlords are a full equivalent for anything proposed "to be given to the ryots."

But even if, of all these benefits proposed for the landlords, not one were conferred on them ; can it be said with truth and justice

* The zemindars do not seem to appreciate this boon, since it would involve in its operation a ryot who might perjure himself for his landlord's benefit (*vide* Article in "Calcutta Review" under heading "Disclaimer." Certainly it would be very ungrateful in a landlord to requite such help by ejecting the giver of it ; and it appears possible, that the danger involved in such services might make the ryots less willing than they now may be, to render them. It is a singular argument for the zemindars

to produce against a proposed law, that its tendency would be to make them act like part of rascals ! This, however, is not a new line ; the British Indian Association in remonstrating regarding Act X. of 1859, said that "the consequence to be dreaded "from such a state of things, is either "that the Courts will be swamped ".....or that the zemindar will betake "himself to fabricating *kabulnats* to "enable him under the proposed law "to realize his just dues by process "of distraint."

that, of those suggested for the ryots, there are any which fall outside the direct provisions of the Permanent Settlement, or the reserved rights of the Sovereign Power? Let us hear no more from the zemindars of the rights which the Permanent Settlement gave them against the ryots! Whatever claims the zemindars may have upon us, rest on no such foundation as this. They rest chiefly on the consideration that we cannot make history a blank, nor can we bid the last ninety years retrace their steps; we have not to deal with what might or would have been, but with facts as they now are: nor can we lose sight of the enormous mass of rights and obligations which have been created under existing circumstances.

The zemindars, too, have not the power for evil which they had in times of less watchful and efficient administration; and it is perhaps but just to say, that many among them have still less disposition for it than they have power. Official papers now, happily, often exhibit to us instances of liberality and public spirit; and though these are few, considering the magnitude of the country and of its population, they are sufficient to indicate that the zemindars are beginning to realize their duties. We are often told that these good deeds have their origin in ostentation, or still more often in a selfish desire that the doers may obtain honours or consideration from the Government; we do not care to enquire how far this charge can be justified; it cannot be always true, and even where it is, we must remember that "hypocrisy is the tribute paid by vice to virtue," and that much has been gained in Bengal when such a tribute is deemed necessary. The standard of conduct for zemindars is not now what it was a hundred, fifty, or even twenty years ago.

For these and other reasons, we hope, that they may yet become all that Lord Cornwallis, and the statesmen of his day, expected the Permanent Settlement would make them. We would leave zemindars in the possession of the enormous* gains which they have acquired since the settlement; and we are even willing to give them more, in cases in which it may be reasonable to do so.

* "The Government jumma of the Permanent Settlement was about Rupees 2,85,87,722 and eight-tenths of the gross rental. One-third of the land was waste, it is said: On these conditions, if the whole of Bengal had been under cultivation, the gross rental would be Rs. 4,76,46,203. According to the Report of the Board of Revenue it was, in 1877, equal to

Rs. 13,03,78,935. In other words, the rates of rent which were intended to be fixed by the Permanent Settlement have been trebled, and the ryots are now being compelled to pay an excessive exaction of Rs. 8,27,32,733 yearly." (Mr. O'Kin-ealy's Minute, Appendix to the Rent Law Commissioners' Report, p. 461).

But we cannot forget that, even to this day, in defiance of the Permanent Settlement (which the zemindars tell us is a contract)* abwabs and benevolences are levied without scruple and almost without measure; we cannot forget that there are landlords who collect rents in monthly instalments, each one of which may be the subject of a separate suit; we cannot forget that even among the enlightened and public spirited, there are some, who are stigmatised as grasping and inhuman landlords by public officers who have every motive and every desire to speak well of them; we cannot forget the miserable state of the tenantry of Behar, or the immense sums spent for the relief of a famine-stricken, rack-rented people, who might have been a substantial peasantry, able to bear their own burdens. Let our readers judge, whether it is not the duty of the Legislature to afford to "those who from situation are most helpless," some of the "ease and happiness," which have been so long promised to them, and to which they are entitled by the law, as well as by ancient customs, and the constitution of the country. Let the zemindars, with the memory of the Pubbna disturbances still fresh in their minds, reflect, whether a successful resistance to just and necessary reforms might not

* We have shewn how these cesses were levied in 1769; we will now show the state of things existing a century later. "The modern zemindar tax his ryots for every extravagance or necessity that circumstances may suggest, as his predecessors taxed them in the past. He will tax them for the support of his agents of various kinds and degrees; for the payment of his income-tax and his postal cess; for the purpose of an elephant for his own use; for the cost of the stationery of his establishment; for the cost of printing the forms of his rent receipts; for the payment of his lawyers. The milkman gives his milk; the oilman his oil; the weaver his clothes; the confectioner his sweetmeats; the fisherman his fish. The zemindar levies benevolences from his ryots for a festival, for a religious ceremony, for a birth, for a marriage; he exacts fees from them on all change of their holdings, on the exchange of leases and agreements

"and on all transfers and sales; he imposes a fine on them when he settles their petty disputes, and when the police or when the magistrate visits his estates; he levies blackmail on them when social scandals transpire, or when an offence or an affray is committed; he establishes his private pound near his cutcherry, and realises a fine for every head of cattle that is caught trespassing on the ryots' crops." (See *Bengal Administration Report*.) It is not of course meant that all these abwabs are levied by every zemindar, but some or others are levied almost throughout the whole province. In how many estates, not managed under the supervision of Government, does the zemindar really pay the road-cess from his own profit? But this is not all; zemindary servants are systematically underpaid men, in positions of great trust and responsibility, they nevertheless receive less than the pay of day labourers, it being understood that their real income is obtained from perquisites.

bring about their ruin ; and whether—not to speak of duty—it may not be wise and politic for them, in their own interests, to surrender some of what they (not unnaturally) consider their rights, which have never been given them by law, or which are opposed to the spirit and intention of the settlement on which they found their claims.

A DISTRICT OFFICER.

ART. XI.—“TRAVELS OF A HINDU.”

CHAPTER I.

(Continued from the “*Calcutta Review*” for October 1880.)

October 6th, 1876.—The train carried us on from Saharanpur, past the *Doab Canal*, to *Sirsawa*, a town of ancient date, which fell on the route of Mahmud of Ghizni from Kanouj. and also on that of Timur from Haridwara. Ten miles west of Sirsawa, we crossed the Western Jumna Canal, or the bed of the Budhi Jumna. Close by this canal, on a spur of high land, lies the village of Sugh, which is identified with the ancient Srughna, or Hwen Thsang’s *Su-lo-kin-na*. In the interval—some three miles—between Sugh and *Jagadhri*, the next station, the Jumna forms a line of demarcation between the region of sand and the region of alluvium. Nature has set it as a permanent mark between the arid desert on the west, and the verdant valley on the east. To cross the Jumna, is geographically to leave the Doab behind.

Between Burrara and Ambala, is passed another river of still greater celebrity and sanctity. If the Jumna calls up associations by hundreds, the Sarasvati does so by thousands. In slowly passing the bridge thrown over it, we looked out from the train to survey this classic stream. The appearance of the Sarasvati is not at all worthy of its great historic fame. It is a poor, small, broken stream, flowing through a bed which, as far as it could be judged by the eye, has not the width of a quarter of a mile; and if it were not for the associations connected with it, a man would turn from it as an uninteresting river. The water is clear and placid—the current having little or no strength. The depth also is inconsiderable—in one place we saw a man wade across. Not a craft of any kind is seen upon its waters; but the banks on both sides are clothed with beautiful verdure, and rich mangoe-topes fringe them all along.

The Sarasvati is so named from its peculiar features. Derivatively analysed, the word means “full of lakes,” or pools, into which the stream is broken. But this poor appearance of the Sarasvati dates from her disappearance in the sandy desert; before that event, it was a noble stream, included in the Vedic *Sapta-Sindhavas*, and held rank with the magnificent Punjab rivers. The Rig Veda applies to it the same words, *apasam apastama*, or “most copious of streams,” that are applied to the Sindhu or Indus. The sages of old, dwelling on its banks, speak of it as flowing on “with a protecting current, a support, an iron barrier.

The stream rushes on like a charioteer, in her majesty outrunning all other rivers. Sarasvati is known as the one river, flowing on pure from the mountains to the sea."* According to the Nirukta, *saras*, in Vedic language, means waters.

Crossing the Sarasvati, we passed from the Brahmarishidesha into the *Devanirmittam Brahmadevartam*, or Manu's "tract fashioned by the gods," and the Mahabharata's "Vedi of the Pita-maha"—the seat of the great progenitor. Lying between the "two divine" rivers, Dhrishadvati and Sarasvati—the modern Gaggar and Sursooty—the Brahmadevartam was the abode of our earliest Aryan forefathers, where lived the great patriarchs of our race, our Vedic poets and philosophers. They formed the outermost ripple of the great wave of Aryan emigration, which flowing eastward from the Punjab, broke against and was stopped by the Sarasvati. Owning a common nationality, the Aryans from Central Asia had long lived together undivided in the tract of the Upper Indus. Either becoming straitened for room by multiplication, or pushed from behind by hordes of fresh emigrants, they began to move both westward to Persia, and eastward to India. Those who were carried in the eastern direction, went step by step along the rivers of the Punjab, till, proceeding from the Satadru (Sutlej) by the road skirting the north of the Desert, their vanguard halted, and took up their most advanced position in the Brahmadevartam, bounded by the Sarasvati.

By *Pita-maha*, the Mahabharata must be understood to mean the great leader who conducted and planted the Aryan colony in the Brahmadevartam; who had the merit of binding his followers together, and developing them into a nation and conquering power; who laid down those first simple fundamental rules round which has gathered the mass of laws forming the great Hindu code. The leader of the western Aryans seems to have been Zoroaster. The leader of the Eastern Aryans must have been either Manu himself, or one of his descendants—Vaivasvata—bearing his patronymic—the same who, in after ages, for his supreme intelligence, his great creative genius, became apotheosised, and worshipped under the name of Brahma.†

The picture of early Aryan society in the Brahmadevartam is reflected by the hymns of the Rig and Sam Vedas. Fancy paints the members of that society as living in a state of tranquil bucolic felicity. There were shepherds who tended the flock, and agriculturists who tilled the ground. There were spinners, weavers,

* Hymn 95, Book 7th. See Muir's "Sanskrit Texts."

† In the earliest Vedic sense, Brahma meant a prayer or hymn,

and from that a poet. Afterwards it signified the *knowing*, and at last the creative power.

smiths, carpenters, goldsmiths, jewellers, stone-cutters, brewers of ale, compounders of perfume, and other craftsmen called forth by occasion. The able-bodied members of this community, transformed themselves into warriors, and rallied round their chief. There dwelt not only many men with vigorous powers of body, but also men with vigorous powers of mind. Bards chanted there the songs of heroic deeds. Sages made there the first efforts of the human mind in letters and science. The speech spoken there was undefiled, pure Sanskrit. The religion professed there was nature-worship, which was to call on the good spirits of the creation, offer them thanksgivings, and ask them to participate in the *Soma*. The Brahmagaverttam was the cradle of civilization, the focus from which emanated and radiated the first light. It was the stage on which was played the first scene in the great drama of Hindu national life, the hallowed spot whence, bearing the germs of improvement, issued forth the propagandists of future Hinduism.

The region most interesting in the Brahmagaverttam must have been that on the banks of the Sarasvati, which would not then, as now, a poor shrunken stream, but as "the chief of rivers." Thereabouts, probably, was the seat or capital of the hoary *Pita-maha*. The site of his city is now a matter of pure conjecture. It was somewhere, as it strikes us, in the vicinity of Thanewara, where it was in that early age little better than an outpost, which, with a secure rear, was planted on the utmost frontier, facing the unconquered regions in "the Orient." The landscape about the Sarasvati then presented objects of which the like is not to be seen in our day. The river bank, in those ages, was dotted with many an imbowered hermitage, overhung with the smoke of sacrifices, and resounding with the chant of sonorous hymns. They were the abodes of our Vedic Rishis, or contemplative sages, who studied and invoked the mysterious agents of Nature in quiet seclusion. Vasistha and Viswamitra, Parasara and Vyasa, had their retreats along the banks of the meandering Sarasvati. Vasistha "had an extensive hermitage in Sthanatirtha," or Thanewara. To the east of it was Viswamitra's hermitage. These two mighty ascetics exhibited a great rivalry in their austerities.*

Veda-Vyasa, who has the greatest name in Sanskrit literature, who is one among our six immortals, had his *asrama* in a place which is still called after him *Vysasasthali*, and is situated a few miles from Thanewara. To the imaginations of literary pilgrims, the classic spot, by the side of the Sarasvati, over which hovers

the glory of his name, is fascinating in the highest degree. The Hindu nation, in European fashion, may not have marked the spot with "storied urn or animated bust" in *memorium*. But in their own fashion, they have cared to remember its site through every variety of change; to erect into a sacred pilgrimage the place where is left the trace of his mortal footstep, where he collected and fixed the floating literature of the Vedas, where he founded the school in which the Rig Veda was taught to Paila, the Sam Veda to Jaimini, the Yayur Veda to Vaishampayana, and the Athwarvan Veda to Sumantu. Vyasa was not satisfied with having accomplished this great literary undertaking. He yearned to leave behind him something original from his own great mind. It is said, that walking one day by the side of the Sarasvati, wrapt in musings, he was inspired to celebrate the great war of the Mahabharata. Vyasa was the minstrel and rhapsodist of the Sarasvati, as Homer was the minstrel and rhapsodist of Meles. If Shakespeare is "the sweet swan of Avon," Vyasa may be styled the tuneful *Chakravaca* of the Sarasvati; and, like the dramas of Shakespere, the epic of Vyasa has not suffered the less from the hands of copyists, editors, and interpolaters. By making Vyasa a Bengali, a native of the Brahmaputra, Mr. Wheeler does a very great honor to the people of Bengal. But suffice it to say, with reference to this opinion—
 "Laugh where we must, be caudil where we can."

In the Brahmadevittam, the Aryans kept themselves pure and orthodox,—Aryans in type, speech, manners, and faith. Originally come, not as conquerors like Baber and Nadir Shah, but as nomadic wanderers and emigrants, just as the English had come as traders, till conquest became an inevitable necessity for them both, they had with them their wives and daughters, their flocks and herds, from the last of which probably is the fine race of kine in Hurriana. They lived closely drawn together as a united body amidst strangers, without degrading their blood. Here and there, they took an aboriginal wife, and had mixed progeny, like Viswamitra. They ate beef then. They drank soma-brewed beer then. There was no caste. It was the Satiya Yuga. The purity of its people, the patriarchs there whose adventures form the first traditions of national glory, the sages from whom were derived the first treasures of thought and arts of life, made the Brahmadevittam regarded for many ages as holy land, the abode of gods. It was loved and yearned for as Turkestan was by Baber, as England is by Anglo-Indians. Including the Punjab, it long formed an intermediate locality and link between the seceding Zoroastrians on the one hand, and the seceding Brahmins on the other, between Iran and India. But, in later

ages, when the inhabitants of inner India, the occupants of the Brahmarshidesha and the Madhiyadesha, became thoroughly cast in the Hindu mould, and took a deep impress of the Hindu characteristics, the Sarasvati, at first the utmost eastern boundary of Aryan dominion, came to be regarded as the utmost western boundary of "the pure land, governed by Brahminical law."

To bid farewell to the Sarasvati, which has detained us long, let us give the legend of her disappearance. "She was coming down the country with a book in her hand, when she entered the sandy desert, and was unexpectedly assailed by numerous demons with frightful consequences, making a dreadful noise. Ashamed of her own want of foresight, she sank into the earth, lest the Nishadas should become acquainted with her."* The place of her disappearance is called *Vinasana* in Manu's code.

It would seem that the term *vali*, or raised seat, used in the Mahabharata, was applied as much from a religious, as from a geographical point of view. The tract between the Gaggar and Sarasvati, is a little plateau interposed by Nature between the higher basin of the Jumna and the lower basin of the Sutlej. This elevation may be either from the upheaval of the land accompanying the submergence of the Sarasvati, or from the sub-Himalyan torrents annually overflowing and overlaying the region with alluvial deposits. It is still the same green country. But the arid region of the desert, with its "sandhills in endless succession like the waves of the ocean," is not far off. The warm breath of the *loo*, felt every now and then, is coming from that quarter. No more are the Sivalik hills a soft, bluish streak upon the horizon. The eye now grasps them in a much clearer form. Every thing seems to improve—the country, the cattle, and the men. The stalwart specimens of humanity are particularly interesting. The highroad through this tract has shifted its line many a time. The oldest route for communication between Hindustan and the Punjab, lay skirting the desert, and came out near Thaneswara. It was the route by which the Aryans pushed their way; by which Alexander meant to advance to the Ganges; by which Hwen Tshang travelled; by which Mahomed of Ghizni, Mahomud Ghorî, and Timur, poured down with their troops. This old line being encroached upon by the desert, a new line was carried up, *viâ* Ambala and Sarhind—the same that is spoken of by Bernier, and has existed to form a part of our modern Grand Trunk Road.

At Ambala the first object to attract our notice, was the corps of Sikh guards, in blue uniform on the platform of the station. Tall and stately, their persons were remarkable for a manly vigour, such as

rarely meets the eye in Bengal. The sentinel posted at the ticket-door was an extra lofty figure. More than six feet high, he out-topped all the crowd about him. He looked a perfect cavalier—his soldierly appearance being largely improved by his whiskers and beard. “ He is a *sikha mardana*—the true stamp of a man. He has eyes out of which the man shines.* ”

Next our attention was drawn by a group of native ladies standing apart from the crowd at one end of the platform. Dressed in *dhotis*, they were at once made out to be Bengali women—all matrons, who had come up to go down from here, by the shortest cut, to Kurukshetra. Great credit is due to these poor, aged, and, most likely, widowed ladies, who, under the escort of two or three as aged and ignorant male relatives as themselves, have ventured to travel thus far out of the usual circle of a Bengali's pilgrimage. Truly have they listened to the recital of the Mahabharata. They have a livelier imagination than many of our political Babus, who are immoveable fixtures at their homes, most unreasonably expecting to be worshipped when they are mere wooden stocks and sham idols. Warned by their national traditions, the women who visit the scenes of their national glory, are worthier beings than those who justify their political existence by half a dozen memorials in the year. In India, pilgrimage is another name for travel,—and *mela* for art exhibition.

The hotels in Ambala are close by the station. In some five minutes we walked down to the Royal Hotel. The Native speculator, who has started this project, keeps himself a myth, pulling the wires from behind. His enterprise wears a European look, with European superintendence, European neatness, European routine. The rooms, with high, sloping, thatched roofs, look into a large plot of ground, dotted with little gardens of European plants, all in flower now. They were all occupied by Sahibs who had dropped in from various quarters at this fair season. Luckily one of them was unoccupied, when we made our appearance. There is more than one hotel here, keeping demand and accommodation duly balanced. The Native Babus travelling up to Simla, generally take up their quarters at a Kali-Bari—their hotel must be presided over by a god to make it the common ground for all castes.

Creature comforting over, we started off to see the town. They say the heat here is as withering as the cold is biting ; but we had a nice October evening for our pedestrian excursion. Ambala strikes the observer as a position of strategic importance. On the extreme north-west, at the very gate of

* Conversation between Lord Mayo and the Ameer Shere Ali, at the Ambala Durbar.

Hindustan, it is as it were a break-water to check the tide of invasion. More than eleven hundred miles have we travelled up here. But little or nothing strikes us as strange, and makes us feel that we are in a new country. The same plain, the same plough working in the fields, the same well-irrigation, the same village congeries, the same naked peasantry, and the same women with veiled heads and armlets to the elbow. It is the same Hindusthani *lingua franca*—the same substantive civilization. In Europe, this distance would cover England, France, Switzerland, and Italy, and afford to the traveller a great variety of scenes and conditions—geographical, political, social, and artistic. The uniformity of views natural, is a proof that India is meant by nature to form a grand unity. The uniformity of views artificial, speaks of the ubiquity of the Hindu impress on the life of the country. The only new sensation experienced is that from a dry, light, elastic air. The only new object witnessed, is the gigantic limestone escarpment of the Sivalik hills, which wall in the plains.

There is little to see, and nothing to admire, in Ambala. It comes under the head of a cantonment,—and one cantonment is so very like another; a repetition of the same wide roads, shaded walks, trim bungalows, barracks, bazars, parade-grounds. This is the white town of Ambala, with all the improvements on earth at the expense of the Indian tax-payer. The black town—a nucleus with its intricate cobweb of narrow streets and lanes, and the usual squalor and wretchedness of Indian life—is some two or three miles off. There live the native tax-payers, calm and resigned, wondering at the Anglo-Indian character so complete in its selfishness.

Ambala does not rank with those hoary elders which speak from the depths of a remote antiquity. It is a young city, of hardly yet a century old. On the irrepressible Sikhs—scotched many a time, but not killed—overrunning and occupying all the territory from the Indus to the borders of Delhi, Ambala was carved out as a principality by one of the sirdars. In 1809, Ranjit Singh, desirous of combining all the Sikh chiefs under his suzerainty, crossed the Sutlej. His expedition caused the movement of a British force across the Jumna. Ranjit was then in the early stage of his career—just digging for and laying the foundations of his Raj. He was callow young to try conclusions with a Power which had not yet known a reverse in India. Very prudently did he sign a treaty, and bind himself to confine his operations within the right bank of the Sutlej. The Cis-Sutlej Sikh chiefs, who had craved for aid, were now taken under British protection, upon the condition that their territories

should lapse on failure of rightful heirs. Ambala is an escheat to the British Government.

The sun had withdrawn his last rays, and in the room of glare was the soft gray of evening. We threaded our way through many beautiful walks, along which trailed long strings of camels—a sight very common in a cantonment. Our stroll at last brought us to the side of a great plain, across which the view extended to the swelling heights of the Sirmoor range. It was the plain of that magnificent gathering of troops, native princes, and British officials, which has given celebrity to the name of Ambala. As "fame is the last infirmity of noble minds," so pomp is the last refuge of civilization. The age of heroism disappears, and that of pageantry succeeds. To resort to tawdriness for effect, is to betray a sign of deterioration. It is substituting semblance for substance—ignoring the difference between gold and glittering imitation. It tells that the thin end of the wedge of decay is in. The policy of Durbars received its great development from Lord Mayo's Irish taste for magnificence. During the few months of his career, the red-cloth days in the Government House exceeded the red-letter days in the almanac. The following is at once a succinct and graphic account of that Durbar :—
"Who hath not seen Seville," according to the Spanish proverb, "hath not seen a marvel." The same may be said of an Indian Viceroy's durbar. The scenic splendour of the pageant constitutes its humblest charm. That might be rivalled or surpassed in other lands ; but, **except** perhaps at an imperial coronation at Moscow, nowhere else can be found so harmonious a combination of the distinctive types of Europe and the East, so vivid a revelation of all that can best symbolize the wonders of comprehensive empire. On one side, there is the disciplined might of England, represented by a gathering of picked troops—infantry, cavalry, and artillery—capable, as they stand, of making a victorious promenade through the length or breadth of India, though half the country should be in arms against them ; on the other, the fantastic pomp of Asia, impersonated in an array of luxurious princes, who, by the lustre of their jewels, the bellicose aspect of their motley followers, the bulk of their elephants, and the costly caparisoning of their horses, convert the act of homage to their common master into an occasion of emulous display, each striving to outshine his peer. In some sense, it is an Oriental edition of the field of the cloth of gold. The vast plain all round the city of rendezvous is white with encampments. Every camp clusters round the flag-staff of a separate authority, and at every staff, save one, the drooped flag denotes subordination to a superior power in the vicinity. A long,

broad street of marquees, tenanted by the various members and attachés of the Supreme Government, leads up to the palatial mass of canvas forming the Viceregal pavilion. The feudatory chief whose turn may have come to approach the 'Lord Sahib's' presence, is greeted at the mouth of the street by a salute of guns in number apportioned to his rank. Up the street his *cortège* slowly moves through lines of British troopers, whose sabres flash welcome in the sunshine. A fanfare of martial music announces his arrival at the entrance of the pavilion; secretaries and aides-de-camp receive him as he alights, and see him doff his shoes; the infantry guard-of-honour presents arms, and so, between two rows of clashing weapons, His Highness is conducted to his allotted place in the assembly. The throne under the central canopy is vacant for the Viceroy. Right and left of it, in horse-shoe fashion, chairs are arranged; these for the Native potentates, and those for British officers. Behind the latter, and drawn aside, as having no proper status in a purely eastern ceremony, gleams a small and select *parterre* of English ladies. All present are seated, and a growing stillness indicates the hour of the Viceroy's advent. All rise as he appears, heralded by a royal salute, and with a brilliant staff around him. Proceeding to the canopy, he stands motionless below it—the whole couclave also standing in silence—until the last of the twenty-one guns, which recognize the majesty of India's absent Empress, has ceased. Then he mounts the throne, and the business of the Darbar begins.

"Such was the scene at Ambala, in Upper India, under the sun's declining rays, on the 27th March 1869. Yet in some respects the spectacle on that occasion presented a striking contrast to the usual routine. A truthful sketch of it appeared shortly afterwards in the *Illustrated London News*. The central personage is, of course, Lord Mayo, and not far from him, sits Napier of Magdala, both of them bare-headed; below the dais the slipperless figures of half a dozen Panjab chieftains, and the bared-heads of Sir Donald Macleod, Sir William Mansfield, and Sir Henry Durand, are equally familiar to the eye. But who are these, a man and a boy, occupying chairs of equality on the dais with Lord Mayo, their heads covered with the tall, black lamb's-wool hat of Persia, and their lower limbs encased in trousers and boots of European pattern? They must be sovereign lords of foreign territory, owing no allegiance to the British Crown. The boy is Abdullah Jan, a younger son of Shere Ali of Afghanistan; the man is Shere Ali himself. Shere Ali's past history is legible in his externals. In his air there is all the dignity which royal birth, coupled with a long experience of misfortune, seldom fails

to confer; and the habitual melancholy of his passion-ravaged countenance is eloquent with the tale of that domestic grief which, four years ago, shook his reason with an almost irreparable throe. But the dominant feature is the eye, and its expression sternness, the practical sternness of one never known to spare any adversary that might be wisely struck. But here, five hundred miles within the British frontiers, and parading a precedence co-ordinate with the jealously guarded supremacy of the British Viceroy, how comes Shere Ali here? Fifteen short months ago he was a helpless fugitive, beaten out of Cabul, beaten out of Kandahar, beaten out of Balkh, and seeking a precarious shelter at Herat. Russia and Persia had alike refused to help him, and the determination of British India to leave him to his fate had been brought home to him by a score of humiliating rebuffs. He appeared sunk in complete and irretrievable ruin. Now his lot is changed indeed. The same English who lately had not an obolus of alms for his destitution, are now receiving him with the honors of a royal guest. From approaching in supplication at their feet, he has risen to appear among them as an equal who can name his terms for mutual obligations given and conferred as between friends. He has already accepted ten thousand stand of muskets, and 120,000*l.* in cash. He is to take back with him to Afghanistan a perfectly equipped battery of light guns; and he has a prospect of more supplies of money in the years to come. The gifts merely personal to himself, which in the present Durbar strew the carpet before him in one and fifty trays, are valued at 5000*l.* See Lord Mayo takes a jewelled sword, and, offering it to him with his own hand, says: 'May you be victorious over your enemies, and with this defend your just rights.' And listen to the Amir's reply: 'I will use it against the enemies of the Queen of England.*'

With these last parting words, ringing and reverberating through all Asia, did the Durbar come to an end. Night fell, and still we lingered by the great plain of its celebration. How silent is it now, where they reproduced a Babel. How solitary now, only the flitting form of a homeward pedestrian momentarily turns up and disappears in dim starlight, where the stir of life was intensified by the convergence of human streams from all parts of India. The contemplating bystander is struck most by the strange metamorphosis brought on in the whirligig of time. The Durbar was Russophobia in a new phase, in its lucid moments. The first phase, exhibited forty years ago, was the first dark phase of stark madness, under which was launched forth an

* *Mischievous Activity*, by J. W. S. Wylie.

expedition "begun in vain glorious bombast, and carried out amid every species of miscalculation, diplomatic blundering, and military incompetency," and from which the fruits reaped were disaster and shame. The political vagary cost twenty-five thousand lives, and fifteen crores of rupees. Ever since that period, "the vision of the skeleton army wasting in the snow" has stood "as a historical spectre, waving off with its icy fingers any further advance" beyond the natural limits of India. Sobered by the chastisements of misfortune and disgrace, Russophobia showed itself in a milder type, under its second fit. In place of quarrel and war, it had good-will and peace. Instead of dethronement, it gave the most formal recognition of sovereignty. It granted presents of arms and money, promised every moral support, consented to receive a friendly visit, and accorded a cordial reception with all the honors due to an independent ruler. Truth is stranger than fiction.

Touching the Afghan policy, there are two schools, quaintly styled the *Masterly Inactivity*, and the *Mischievous Activity*. The followers of the first school well bear in mind the lesson read by the disasters of 1841-42; an episode, the ingloriousness of which, has no parallel in the whole cycle of English history. Their minds are haunted by the recollection of the ice and snow, the nakedness and famine, the treachery and ferocity, which, out of 25,000 human souls, left surviving only one European and two natives, to tell the tale of woe and death. The Masterly Inactivity school of politicians acknowledge Afghanistan to be a country made independent by geography. They reprobate it as a barren poverty-stricken land, peopled by a semi-savage race of anarchists and marauders. They are for letting alone foreigners, dealing with them on international terms, and treating them as neighbours with every right to carry on their government after their own fashion. In brief, they are for non-intervention, *vis-inertia*, and a friendly understanding.

On the other hand, the school of Mischievous Activity is a school of the most opposite thinkers; of alarmists, whose minds are thrown out of their balance by the least stealthy step of Russia towards the Punjab frontier. They cannot await the development of events in slumbrous indifference, to be broken by a rude awakening. Familiar with high-handed interference in the affairs of the Indian princes, they are for exercising similar privileges in Afghanistan, for breaking it into harness by similar means. They look upon themselves as "the great ameliorating power in Asia," whose mission would not be fulfilled if they minded only their own business, and abstained from all interference in the cause of humanity and civilization. They are aggressionists who deny the

existence of international law with barbarians ; and annexationists who gauge their power by the arms of precision which have increased the effectiveness of attack against uncivilised States. They are for "a spirited foreign policy," for "a scientific frontier," for meeting intrigue with intrigue, and force with force, and they advocate a policy of action.

The Ambala Durbar is interpreted as the outcome of a compromise between the two schools—as taking a midway step between quietism and action. Indeed, it was a new spasm. By it, the Indian Government shook off its lethargy, and proclaimed its abandonment of a pure *laissez-faire* policy for one of surrounding the Afghan ruler with British prestige, and erecting him into a bulwark with English money and English weapons. Persia took alarm at the Ambala pageantry, as inaugurating an era of British championing of Afghan interests. The malcontent population of Central Asia were impressed by it, with the idea of England's longing to enter the lists against their great oppressor. Europe read it in the light of a complication, which boded a collision between the two rival powers. And Russia understood the meeting to be a counter-demonstration—a counter-move against her in the great Asiatic game. Her press described the event as "the first stone of the wall which the Anglo-Indian Government was hastening to build across the road of the Russians in Central Asia," and remarked that "the commercial war waged between England and Russia, on the northern frontiers of Afghanistan, was not at all unlikely to give way some day to a combat with more sanguinary weapons than weights and measures."

But "the scheme which bore blossom at the Ambala Durbar," was "worm-eaten in the bud." All the calculations with which that scheme had been entered upon went wrong, and it proved only a political bubble. Very studiously had the ceremonial been made gorgeous to display the majesty and might of England. The occasion was especial. It was to give reception to one who was regarded then, not as "an earthen pipkin between two iron pots," but as an independent potentate and ally ; and the arrangements were on a scale befitting his rank. They were meant both to strike and overawe an oriental Prince. But Shere Ali was an exceptional oriental. He was made of much sterner stuff than an Indian feudatory. To call him great, would not be justifiable. But by nature and training he was a soldier and politician, a combination which has become rare indeed in Asia now.

From his boyhood, did his arms use—

"Their dearest action in the tented field,
And little of this world could he speak,
More than pertains to feats of broil and battle."

Questions of war and alliance, of organization and finance, had been his life-long study, and their discussion had formed him into the strenuous and sagacious man who shaped his course by "the greed of material gain, and the fear of material loss." Severely tried by fortune, all milk in his nature had soured. He had grown keen by friction, wary from distrust, and cynical from bitterness. Shere Ali had his own calculations in coming, as the British had theirs in welcoming him. He came not merely to be fêted and flattered, and then returned to his mountain home dazzled and astonished. He sat on a shaky throne, and wanted propping. He was poor, and wanted a subsidy. He was surrounded by rivals and intriguers, and wanted a guarantee to flaunt in their faces. His first object was to have a well-trained and efficient army. His next great aspiration was to give a new shape and destiny to his nation, and make it reckoned and recognised as a power in the world. Pomp and glitter told as little upon his cold imagination, as does an Indian *nautch* upon a European foreigner. His keen sagacity saw through the hollow sham—the simulation of *rap-prochement*. If Shere Ali had let fall the words, "I now begin to feel myself a king," he was far from meaning to say that he was "pleased with a rattle, and tickled with a straw." The Railway and other wonders of European science could not but strike him; but with the taste and lessons of a warrior, nothing appeared to him so wonderful as the British army. The proofs of British administrative genius disclosed at every stage of his progress, did no more than keenly suggest to him the reform of his own people, who were "content with discord, content with alarm, content with bloodshed, but never content with a master."* The might and majesty of England paraded before his eye, only made him the more careful to hedge himself within greater safeguards, and elect to remain a barbarian rather than "champ the bit and foam in fetters." He saw the Indian feudatories in their splendid vassalage, and their fate taught him to avoid falling into the same snares, and being held in the same leading-strings, and eating the same humble pie. Their abject condition taught him to become obdurate against surrendering his dearly-prized privileges, and in upholding his integrity and independence with an uncompromising determination and adamant fortitude. Disappointed at the barrenness of result, he went back to brood in sullenness over the ill-success of his wild goose chase—carrying with him the lesson to repay the British in their own coin—to meet trimming with trimming, and rebuff with rebuff. Save and except

* Elphinstone's "Travels."

Ranjit Singh, Shere Ali is the only other Asiatic prince who had "found out" the British—who was able to sound to the bottom the meaning of appointing a Resident, entering into a subsidiary alliance, and prohibiting all correspondence with other European nations. He well understood them to be the sly steps by which all the stupid Indian chiefs had been duped and entrapped; and he was on his guard against them with all the native force of his character. The British meant to take him in by the same process that had given them invariable success in India. But they were baffled. They found Shere Ali as hard and cold as the rocks and snow amidst which he was born and bred. The tough Afghan was not to be overcome by either fear or favour. He coolly kept them at arm's length, and laughed at their impotent snarling. For the first time in Anglo-Indian history, did the aim of the Anglo-Indian Foreign Office go amiss. For the first time did the Anglo-Indians find, there was a match in diplomatic tactics for them in Asia. *Much bruit and no fruit* never had a costlier and more telling confirmation of its truth than in the Ambala Durbar. Nought has been gained by that Durbar, but to make more wakeful the Anglo-phobia of Russia—and the completeness of the *piaseo* has been made apparent by after events.

There is another point of view—the Native stand-point—from which to notice the Ambala Durbar. Nobody has thought it worth his while to note the effect of that Durbar upon the feeling of our native princes. On strictly political grounds, the union of her several discordant States under a paramount power cannot but be admitted to be a most desirable consummation for the good of India. Unquestionably, the Crown of England is now that paramount power. But the feudal system maintained under her rule, is without a precedent in the history of India. Now and then a temporary and nominal acknowledgment of supremacy, is all that a powerful Hindu Maharaj Chacravatti, or a Mogul emperor, exacted. The reality of an Indian Suzerainty has never existed before. To lay claim to it as an inheritance from the great Mogul, is only to give a color of historical or traditional justification to an assumption such as a powerful man takes advantage of over a weak neighbour. None of their Highnesses of Kashmir, Jaipur, Jodhpur, Gwalior, Indore, or Hyderabad derived their authority vicariously from the British Government. Most of them date the existence of their power from centuries before England had a political entity. To grant them *sanads* in 1862, was purely a gratuitous procedure, in which Lord Canning was unauthorized by treaty, and unwarranted by example. It was a piece of political clap-trap, by

which weak isolated chiefs, placed within a cordon of guns, were over-awed into bowing their heads to the yoke of vassalage. In the ill-defined and inconsistent terms of relationship on which it is maintained, is found the most cogent proof of the Suzerainty being a usurpation, pure and simple. On the one hand, the feudatories are acknowledged as independent princes, entitled to receive salutes, keep armies, coin money, administer their own justice, and be let alone from all interference. On the other hand, they are strictly prohibited from importing improved arms, employing European officers, or corresponding with European powers—they are vexatiously interfered with even in petty matters, dictated to most imperiously, called upon to implicitly obey orders, furnished with an administration, visited with rebukes, commanded to leave British territory, disgraced, and deposed as offenders. Now they are respected as sovereigns, then are they summoned as the most amenable subjects. Many a time have the Indian chiefs been called to render homage, but they have never felt so humiliated as at the Ambala Durbar. It sorely hurt their pride to be degraded before the eyes of a foreigner. The elaborated, unusual splendour to welcome and honor a poor, semi-savage, Barakzai Chief of yesterday, before the time-honored representatives of the Lunar and Solar Houses was "gall and wormwood" to them. "It seared their eye-balls" to witness his reception upon a footing of equality with her Britannic Majesty. Not only did the Ameer "come on," and they "go back," but they sunk to "a lower deep" by their having had to revolve round the central figure of a petty subsidized alien. Their heart-burning has never found expression—it is not loud, but deep. The cheapest defence for India lies in the contentment of her people. Her strongest bulwarks are her native chiefs, and to reduce them to ciphers, is to spike the best opposition-guns. The buffer of a subsidized Afghanistan would not stay the dreaded avalanche—would not make Russia abate in her progress by one inch of space, or for a single hour of time. The true political millennium is that which holds the vision "of the Cossack and the Sepoy lying down like lambs together on the banks of the Indus."

This is one side of the question. But every question, says Sir Rogerly de Coverley, has two sides. Let us not from sentiment shut our eyes to a true estimate of our native princes. They belong to the oldest royal stocks in the world. They are rulers of States equal to kingdoms in Europe. Their power affects the well-being of 50 millions of people. But they are unworthy representatives of their ancient houses, representatives who lack all manliness, intelligence, and wisdom, who are

"sheep in lion's skin." Placed at the head of States, they are our least practical statesmen. Two great political factors now rule the destiny of India. In Sancho Panza's fashion, they may be styled the *some-thing-to-lose* class, and the *nothing-to-lose* class. The first comprises our maharajas, rajas, zemindars, fund-holders and office-holders, or, in other words, the do-nothings, imbeciles, toadies, dummies, dittoers, ap-ka-wastais, and—

"Many a duteous and knee-crooking knave,
That, doting on his own obsequious bondage,
Wears out his time, much like his master's ass,
For nought but provender."

Othello.

The second-class consists of our Babus and Brahmos, or, our *do-somethings*, public-speakers, public-writers, innovators, and reformers. Between our aristocracy of wealth, and our aristocracy of learning, the difference may briefly be pointed out by observing, that the one has the ability of making "a great State small, and the other has the ability of making "a small State great." Our big Highnesses, revered as our household penates and prized as precious heir-looms, are merely our nominal, ostensible leaders. The real, *de facto* leaders of our nation, are those who, having cast off their archaic skins, are *Manús* with new ideas. How have we always wondered that, in a hundred years, not one of our native princes has been able to profit by drawing lessons in state-craft from British rule, and educating himself into an enlightened ruler, with the virtues of public spirit, and the magnanimity of identifying his greatness with the greatness of his people. But, far from any thing of the kind, they do as ever "stand fast on their centres," and maintain a *status quo* in purblind fatuity. There is one who is vainly ambitious of putting forth a bellicose aspect, when he should anticipate that his Suzerain is waiting a convenient opportunity, with unhampered hands, to draw out his last tooth. The Aryan predilections of another are so strong, that he would Sanscritize us into gymnosophists in this nineteenth century. A third rests content with simply imitating the *nuksha* of English courts and councils, of English schools and hospitals, but never thinks of improving the political life of his subjects by giving up the orthodox doctrine of "I am the State," and introducing the popular element in the administration of his country. Not without reason did Shere Ali eye them, at the Ambala Durbar, with a contemptuous side glance, and hold them as no better than bedizened butterflies. His scorn calls to mind the saying of an Afghan, who, on being twitted by a Calcutta Babu, on the fall of Ali Musjeed, replied, *Lurhai ko*

toom kaya janta, toom lok ta chiriya hai, "what do you know of war, you are all caged birds." No men in India occupy so unenviable a position as our native princes. The greater the diguity, the greater the humiliation—the greater the stake, the greater the sacrifice. They are themselves to blame for having slid and sunk into their present pitiful condition. They have none of them a single kingly qualification. None of them have brains to perceive what is to their best interest, and then pursue it with a true devotion. In effect, their States have ceased to exist, only the public gazette has not brought them under the unpopular word; annexation. In the interests of millions, either they should mend, or their States should pass under British rule—with the proviso, that those States should not be turned into fields for the aggrandizement of British officials, speculators, and planters ; and, above all, of Manchester.

(To be continued.)

BHOLANAUTH CHUNDER.

THE QUARTER.

SOME fears were entertained towards the close of last Quarter and beginning of this that Naini Tal would require to be abandoned as a hill sanitarium. These fears have not been realized ; and active steps are being taken to resuscitate, as far as possible, the varied attractions which this delightful resort offered to visitants from the plains. The Government have accepted the suggestions of the Committee which reported on the condition of the place, to grant a loan of two lakhs of rupees at $4\frac{1}{2}$ per cent. to undertake the necessary measures for the safety of the station. The bodies of Mr. Drew, and about twenty natives were recovered, and as no hopes were entertained of more being found, a solemn funeral service for the dead was held on Wednesday the 29th September, by the Rev. B. T. Atlay, near the spot where the unrecovered bodies were supposed to lie. Rs. 7,000 was subscribed at Naini Tal for the widows and orphans of those who perished, and subscriptions have been opened at Allahabad, Bombay and elsewhere for the same object. The rains which caused the appalling landslip at Naini Tal produced even more disastrous results at Rampur, 1,500 inhabitants of that place were swept away and drowned by the rising of the Kosi, which burst its banks and carried everything before it. The exact boundaries of the landslip and the direction of its fall are thus described in the *Englishman* of "September 29th." The *Pioneer's* Naini Tal correspondent "supplies further details of the appalling catastrophe at that place."

The Victoria Hotel, it appears, was built upon a plateau of limited area immediately at the foot of the Sher-ka-Dunda Hill, which rises behind it almost sheer to a height of 500 feet, where the precipice is or was crowned by old Government House. Immediately below the compound of this house the rock bulges somewhat outwards, and about two-thirds of the way down occurs a scoop which divides its face into two projecting bluffs, and which, by narrowing the course of the landslip, is said to have intensified its violence. The slip commenced in the part of the rock immediately below old Government House, and above this hollow with a breadth of about 150 yards, and after emerging from the hollow between the two bluffs, where it was contracted to 80 yards, spread outwards in the form of a fan to a width of 300 yards, stretching from just below the cricket pavilion on the west to near the Club boat platform on the east. The working party who were overwhelmed were standing just below the contracted hollow described, and below them was the large range of buildings composing the hotel. "Gathering impetus as it

progressed," says the writer, "the enormous body came down on the open ground between the hotel and the public garden, where it found a new propulsive force; for this ground was simply a bed of damp and slippery shale which peeled off bodily to a depth of several feet under the great weight, and thus formed a kind of sledge on which the avalanche was borne onwards towards the orderly room, the shop, and the Assembly Rooms. The shop, a massive structure (originally constructed for a racquet court), was lifted clean from under its foundations and thrown with terrific violence on to the Assembly Rooms and cricket ground—a distance of over 50 yards. Of the Assembly Rooms, the portion nearest the lake would seem to have been hurled into the water, which, though as deep as forty feet at this part, showed, for many hours after the occurrence, evidences of the huge deposit in the shape of the numerous little islands that here and there dotted its surface. It was this sudden displacement of so much water that caused the upheaval of the lake's surface resulting in the wave which rolled from the Assembly Rooms, past the smugglers' rock, and so on, to the bridge under which the surplus waters find their way to the gorge beyond. A small portion of the long line of Assembly Room buildings, that furthest removed from the landslip, alone escaped demolition; it remained standing encumbered with the wreck of what had fallen behind it. Here was situated the pantry, and it was strange to observe that in this little chamber not a glass was broken, not a plate was cracked, not a lamp was injured; while within a distance of six short feet the destruction was complete."

The great landslip is full of interest from a scientific point of view, as throwing considerable light on the formation of mountain-lakes. The tendency of probably the greatest number of geologists is to trace the origin of the majority of lakes to glacial action. Glaciers are in reality rivers of ice, slowly gliding down the mountain sides on into the valleys, bearing with them the ever increasing snowfall, at least that portion of it by far the larger, not removed by evaporation. The fragments of rock which the disintegrating influences of nature are ever detaching from the mass of the hill sides are borne along with the steadily flowing glacier, scouring, eroding and scooping out a channel for itself till it reaches the limit of snow, where the fragments are deposited as terminal moraines, and the melting glacier forms a river. The enormous grinding power of glaciers has scooped out from the underlying solid rock large lake-basins; and there can be little doubt, that most of these lake basins are to be found in districts where either at the present day or at some remote period, the phenomena of glacial action are, or have been

apparent. In this way the origin of lakes in most high latitudes is accounted for, as well as the lake-basins of the Alps, Britain and North America. The glaciers of the Alps and Norway have been carefully described, but those of the Andes and the Himalayas, which are of much greater magnitude, have not by any means been so fully observed. The origin of Himalayan lakes is one of the problems which the distinguished members of the Geological Survey of India have set themselves to study and elucidate; and while the well-known action of glaciers finds an able advocate in Mr. Theobald, on the other hand, Mr. Ball has advanced a very original, and in view of the Naini Tal disastrous landslip, a highly probable theory of the origin of mountain-lakes. The retaining barrier of these lakes Mr. Ball contends is due to landslips. One of Mr. Theobald's objections to the retaining barrier theory of the formation of mountain-lakes is, the improbability of any landslip descending far enough across the valley to account for the formation of a lake like that of Naini Tal. Another is, that while retaining barriers are distinguished by the number of large boulders on the surface, landslips have the heaviest masses beneath and the lightest materials on their surface. In this respect retaining barriers and glacial action agree, that is, both have the heavier materials on the surface the lighter beneath. The Naini Tal landslip disposes, in a great measure, of both of these objections to the new theory of the formation of mountain-lakes. The landslip swept with the speed of thought from the hill side, and plunged far into the already formed lake, while the unanimous testimony of eye-witnesses is, that the moving mass of soil, shale and water, bore on its surface an enormous mass of solid material, and tossed the whole into the lake. As a further corroboration of Mr. Ball's theory the formation of a lake known to have been produced by a landslip in Kashmir is adduced:—"About five years ago, a small lake was formed by a landslip in one of the valleys on the south side of the Banihal Pass in the Jammu territory, on the road which leads from Jammu to Srinagar. After crossing the Chenab, the first stage is the pretty little corner called Rambaud. The next stage is Ramsoo, and the lake referred to is midway between Rambaud and Ramsoo. The hills are very shaly and the roads difficult. After passing along the face of a loose shaly slope, with most appalling khuds below, the road descends among well wooded slopes to the verge of the Bakrali stream, among *chir* and *chap* trees, with pretty waterfalls, and high cliffs around. Now, the road used to lie along the banks of the stream here for some distance, and was a great relief after climbing the steep loose crags above; but now the road suddenly ends at the banks

of a small dark lake, the stream running into it at the upper end and issuing over a great confused mass of rough rocks and debris at the lower. The traveller necessarily ascends the toilsome spur he has just thought he would escape, but from its ridge he sees at a glance the formation. A strip of the hill opposite, from the top to the bottom, has slipped clean down and formed a dam across the stream, leaving a great bare grey scaur clean swept on the mountain side. The pleasant little valley, with its trees and shady road, became a lake, and last year the withered tree tops were still visible in many places two or three feet above water. This landslip happened after long continuous rain, and it is in itself such a perfect model of a very remarkable geological phenomenon in miniature, and so exactly illustrative of Mr. Ball's theory, and of the great accident at Naini Tal, that we venture to ask geologists to make a note of it, and, when opportunity offers, to give a fuller and more scientific account of this interesting *tal* than we can give through the columns of the daily press."

The details of the defeat at Maiwand which have come to hand tend to show, that the chief causes of the disaster were a "deficiency of tactical dexterity"—the British formation has been described as "a thin line with weak flanks, guns in the centre, and an inactive cavalry"—the small proportion of European officers to men in native regiments, and the overwhelming odds of the enemy. The men broke as soon as the officers fell. The crossing of the *nullah* immediately in front of the column by Lieutenant Maclean with two guns, and entirely without escort, which seems to have left General Burrows no choice, but fight where his troops then were, is likely to remain unexplained, owing to Maclean's cowardly murder by Ayub's troops, and the death of so many officers in the battle that followed. Orderly after orderly was sent to recall him, but Maclean was in action against the enemies' cavalry 1,500 yards in advance of the column. The order for the advance of the cavalry brigade was then given by General Burrows, and they followed Maclean over the nullah and the guns took up a position which they occupied till the retreat began.

George G. Hogg, Major, Poona Horse, late Brigade Major, Cavalry Brigade with General Burrows' force, speaks warmly of Maclean "as far too fine a soldier to advance his guns without orders, merely for the sake of doing something which might perhaps hereafter—if all turned out well—have enhanced his reputation for personal bravery. In the *Bombay Gazette* of October 16th, Major Hogg thus describes the closing movements of the battle:—

"At half-past one, things looked critical; but still the troops were firing steadily with great execution, and all branches were

standing as firm as rocks, though the losses, especially in the cavalry and artillery, had been appalling. The smooth-bore guns had by this time been taken out of action as their ammunition had failed ; but the Horse artillery were still firing away rapidly, the officers and men serving their guns in splendid style. Just at this time some Ghazees, who were coming round our right, were seen to be approaching our right rear very rapidly, the mullahs who led them, planting their white flags on the ground, and the Ghazees advancing up to them by rushes. There were not more than about 100 of them at this point, and it was a good opportunity for a cavalry charge, as it was about the only spot where the cavalry could attack without interfering with the infantry who were engaged, more or less, in an all-round fire. Accordingly, fifty sabres of the 3rd Sind Horse, under Lieutenant Smith, and about forty sabres, 3rd Light Cavalry, under Lieutenant Owen, who were on that flank, were ordered to attack them. The men from having stood still so long passive under a murderous fire had at the time their carbines in their hand, and seemed disposed to trust to powder and lead. However, a little hard swearing soon brought them to a sense of duty ; carbines were returned to the buckets, swords drawn, and with their heads in the right direction, they were soon advancing on the Ghazees at a gallop. When within 150 yards of the enemy, just as the charge was going to be delivered, the halt was ordered by General Nuttall, in consequence, it is said, of there being a *nullah* in front of the men. The result of this was that the enemy's courage went up, and the spirits of the men fell in a corresponding ratio. They were, of course, heavily slated by the enemy's fire, and had to retire all in confusion some two or three hundred yards, till they arrived nearly in rear of our centre. As they were reforming, the three artillery guns were trotted out of action in front of them in consequence of there being no more ammunition for the guns. Immediately afterwards on the top of this the crash came, and the infantry gave way.

General Burrows who had been in the thick of the fight throughout then, rode up to General Nuttall, and said, " Nuttall, the infantry has given way ; our chance is a cavalry charge ; do you think you could get the cavalry to charge the line of Ghazees in rear of the infantry, and they might perhaps then be induced to re-form" ? There were not many cavalry left. Only three hundred had gone into action—the other 146 sabres, having been told off to rear guard *with orders not to come to the front*. Out of the 300 sabres 149 horses been knocked over and were *hors de combat*, and the remaining squadron of 150 sabres were more or less demoralised already by their heavy losses. However, the order was given at once to advance and charge, General Nuttall

and his staff placing themselves in front of the men. At that time the Grenadiers were completely surrounded by Ghazees, who were not only cutting the men down over their bayonets, but in some instances had actually forced themselves inside their square. The cavalry, instead of advancing straight to the front where the Ghazees were the thickest, inclined without orders to the right, and fell on the Ghazees who were cutting down the Grenadiers, and there is no doubt they saved the regiment from very heavy loss. Having done this much, the cavalry seemed to think that they had done enough, and instead of advancing straight on to charge the whole line of the enemy, seeing that our infantry had all given way, and that all our guns were out of action, they wheeled to the right-about without any orders, and retired. General Burrows a second time came up to General Nuttall, but the cavalry were by this time completely out of hand, and in spite of the endeavours of the officers, they could not be induced to front again in the right direction, and retired steadily towards the guns and baggage. General Burrows, failing to get the required assistance from the shattered remnants of the cavalry, went straight off to re-join his infantry, and, as stated in his despatch, rallied some of them, and made a final stand in the enclosure. When this failed, all was over; and there was nothing left but to retire in the Kandahar direction. The bulk of the infantry dispersed over a very wide extent of country, and in spite of every endeavour to induce them to close on the cavalry and artillery, they would incline a long way to the left. The result was that, the further they went to the left the further they went away from water, and, furthermore, wounded and exhausted men who might have been picked up, had they stuck to the road, were doubtless, in many cases, cut up without any chance of being saved. The cavalry and artillery kept up their military formation all through the retreat, and with the few infantry who had the sense to keep to the road, checked the attempts of the enemy to follow up their victory. The enemy pursued us with their cavalry for eight miles; but the pursuit was not what could be called vigorous, and was easily checked by the artillery and cavalry, Lieutenant E. Monteath commanding our extreme rear guard—a duty which he performed in a cool and steady manner. When we approached Khusk-i-Nakhud—i.e., about eight miles from the battle-field—the pursuit was given up altogether.

I hope, however, that the public will take note that in this desperate struggle with Ayoub's hosts the number of men engaged did not consist of 3,000, with a large body of cavalry, as has been so often erroneously stated. General Burrows' figures give a total of 2,454, exclusive of officers, European and native; but it must be remembered that 84 men were in hospital, and

300 infantry and 146 cavalry were on rear guard, fighting for the baggage. The cavalry force was further reduced by fifty horses, being lame from the hard work they had performed reconnoitring the week previous. Then, again, there were forty-two men of the 66th used to man the smooth-bore battery ; so that the battle was, practically, fought with 1,400 infantry, 300 cavalry, six guns E.B., and the six guns captured from the Wali's mutinous army : a mere handful, which, surrounded on all sides, half-dead with exhaustion and thirst, without any supports or reserves, withstood the onslaught of 25,000 men and the concentrated fire of thirty guns on an open plain for four and-a-half hours without flinching, and then, all of a sudden, as if paralysed by the excessive strain, went crash, and dissolved like snow till, with the exception of the cavalry and artillery and a few infantry, no semblance of a military force remained. Need I add, in conclusion, that throughout the day General Burrows behaved like the bravest of the brave, exposing himself all through the battle to the thickest of the fire, and when everything was over, to crown all, he twice dismounted, and gave up his horse to bring away wounded officers."

The splendid behaviour of the artillery all through the fight is well known ; and the native troops held well together and fought stubbornly till their European officers and the higher natives were shot or cut down, then without leaders they collapsed and became an undisciplined mob. The chief glories of Maiwand, however, rest with the gallant 66th. General Primrose's despatch reporting the conduct of the 66th Regiment was published in the Gazette of October 30th. The testimony of the Colonel of Ayub's artillery, and the appearance of the ground, confirm the heroic behaviour of the 66th : Colonel Galbraith was last seen kneeling on one knee, officers and men rallying round. We quote as follows from the *Civil and Military Gazette* :—

"A party under Captain Beresford-Piers, of the 66th (Berkshire) Regiment, went out from Kandahar with General Daubeny's Brigade to the fatal field of Maiwand, to search for and 'bury their dead.' Along the line of retreat only 20 European bodies were found ; proving that, like the true Englishmen they were, our gallant fellows had stood fighting 'back to back, and shoulder to shoulder,' to the last, in the blood-stained enclosure where their last desperate stand was made—

Though few and faint
Yet fearless still.

Captain John Quarry, whose name has never yet appeared as being with his regiment, was nevertheless in charge of the baggage and rear guard and sick (some 36 in number) commanding in fact the "covering party," and though not "to the front" during the action, had yet the satisfaction of knowing that his

G. Company formed the "rear guard"—and so the most exposed in the last retirement from the field. The colours were borne by the juniors, Sub-Lieutenants, Arthur Honeywood and Harry Barr, till both fell shot dead! The former, just before holding up the colours, shouted out "Here, men! what shall we do to save these"?—and fell! They were then raised by Colonel Galbraith and second Lieutenant Olivey, a young man who had but just joined the regiment. The former, evidently wounded to death, knelt with the colours raised, and the men instantly rallied round him till he also, and poor young Olivey in turn fell, when, for the last time, the colours were raised by Sergeant-Major Cuppage and Corporal Ireland, who were both shot, and the scene closed. The gardens in which this last desperate stand was made were full of the dead and dying, trampled into gory mud by the fierce rush of thousands of Ghazis; and so the colours could not be found when sought for, trampled as they were, in that bloody mire. The spies say that they were found some days after by the villagers, who burnt them for the bullion, as also their staves. These colours were presented to the 66th by Lord Northbrook on the afternoon of the 11th November 1872, in the presence of the whole of the Kurrahee Brigade, and the "beauty and fashion of the station." The Reverends Blunt Streeton and Ffennel were present at the time, and performed the ceremony of consecration.

Captains Francis James Cullen and Ernest Stephen Garnatt also fell on the field, Captain William McMath reached the garden enclosure we have written of, with one of his arms hanging loosely from the shoulder; having been either shot off or severed by a sword cut. Lieutenant and Adjutant Edward Rayner fell on the field, and were nobly supported by that gallant and good soldier, Drummer Darby, who met his own death-blow when thus aiding his dying comrade and officer. Captain Walter Roberts was shot through the legs, and died of exhaustion while being carried off to the field on the General's horse. His body was taken to Kandahar and buried there."

In the *Gazette* above mentioned General Primrose says:—

"I have it on the authority of a Colonel of Artillery of Ayub Khan's army, who was present at the time, that a party of the 66th Regiment, which he estimated at one hundred officers and men, made a most determined stand in the garden marked "A" in the accompanying plan.

They were surrounded by the whole Afghan army, and fought on until only eleven men were left, inflicting enormous loss upon the enemy.

These eleven charged out of the garden and died with their faces to the foe, fighting to the death.

Such was the nature of their charge and the grandeur of their

bearing, that, although the whole of the *Ghazis* were assembled around them, not one dared approach to cut them down.

Thus, standing in the open, back to back, firing steadily and truly, every shot telling, surrounded by thousands, these eleven officers and men died ; and it was not until the last man had been shot down that the *Ghazis* dared advance upon them.

He further adds, that the conduct of these men was the admiration of all who witnessed it.

This is the testimony of a man who witnessed the scene, and who gave the information before Brigadier-General Daubeny proceeded to Maiwand.

From an examination of the ground, from corroborative evidence, and from the position in which the bodies were found, I have not the least hesitation in stating that this account is true ; and I think His Excellency will agree with me when I say that history does not afford any grander or finer instance of gallantry and devotion to Queen and country than that displayed by the 66th Regiment on the 27th July 1880."

A nominal roll of the officers and men who fought and died thus nobly has been already forwarded to you ; and enquiries from survivors elicit the following facts :—

Lieutenant-Colonel James Galbraith was last seen on the *nullah* bank, kneeling on one knee, with a color in his hand, officers and men rallying round him : and on this spot his body was found.

Here, too, fell Captain William Hamilton McMath, a gallant soldier, and one who would, had his life been spared, have risen to distinction in Her Majesty's service.

Close by Second Lieutenant Harry James Outram Barr was shot dead over one of the colors.

Captains Ernest Stephen Garratt and Francis James Cullen were both killed on the field in front of the *nullah*, unto the last moment commanding their companies and giving their orders with as such coolness as if on an ordinary regimental parade.

Captain Walter Roberts was mortally wounded in the garden, where the last stand was made ; and here also fell Lieutenant Maurice, Edward Rayner, Lieutenant Richard Trevor Chute, Second Lieutenant Walter Rice Olivey, and Second Lieutenant Arthur Honeywood.

The two latter officers were seen holding up the colors, the pole of one of which was shattered to pieces, as rallying points ; and Lieutenant Honeywood was shot down whilst holding a color high above his head, shouting—"Men, what shall we do to save these?"

Sergeant-Major Alexander Cuppage was shot dead outside the garden whilst carrying a color ; and many other non-commissioned officers and men laid down their lives in the attempt to save the colors of their regiment on that day.

With the gallant band who made this last grand effort, fought and died, Major George Frederick Blackwood, Royal Horse Artillery; Lieutenant Thomas Rice Henn, Royal Engineers; and Lieutenant Charles William Hinde, 1st Bombay Grenadiers Native Infantry, with some of his men."

Generals Prinrose and Burrows with their whole staff were ordered to leave Kandahar on Wednesday 6th October; and Jacob's Rifles and the Grenadiers also return to India. It was supposed that General Phayre would assume the sole command; but the public were taken by surprise to learn that General Phayre had been superseded in the command of the South Afghanistan Field Force by General Hume commanding the Allahabad Division, and that preparations were being made to hold that citidal. Three regiments, two of the three being the 14th Sikhs and the 24th Native Infantry, were ordered to Kandahar as early as 15th October. Mr. Lyall accompanied Sir F. Roberts as far as Jacobabad, and then returned to take up his duties at Kandahar. Whether it is the intention of the Government to hold Kandahar as a garrisoned out-post on the northern frontier of India, or that it is merely their intention to keep the place until such time as Abdul Rahman is sufficiently strong to take over the rule of Southern Afghanistan and then evacuate, or that Herat is to be made over to Persia, or that Kandahar and Herat together are to form one independant state, thus dividing Afghanistan into two, under independant rulers, are all of them problematic solutions of the Afghan question, which depend probably on the power of Abdul Rahman to assert and maintain his authority over Afghanistan in whole or in part. Until events develop themselves, Kandahar is still under British rule; and a force sufficiently strong is placed in that citidal to repulse any movement from Herat either under Ayub Khan,—who seems to have been more frightened than permanently rendered harmlessly by the defeat he sustained at the hands of the picked Indian and British troops under General Roberts,—or any other leader who may have sufficient influence to gather an army either in Turkestan or Herat, or elsewhere, and march on Kandahar.

Mr. Lepel Griffin whose name has figured pretty frequently in connexion with Afghan affairs, has been appointed to Central India, and has gone home on a short holiday. Previous to his departure he was entertained at a farewell dinner by his numerous friends. On that occasion he made an important speech, an imperfect report of which, having been made public, gave rise to some adverse criticism on the part of a section of the Indian Press. We are enabled to subjoin from the *Englishman* a correct report of Mr. Lepel Griffin's speech, so far as it relates, to the three following points:—first, regarding the choice

of Abdul Rahman ; second, the march of General Roberts, and third, the withdrawal of the troops from Northern Afghanistan.

“ With regard to the withdrawal from Kabul, the action of General Stewart, who has honoured us with his presence here to-night, and whose distinguished services we all rejoice have been recognized by Her Majesty and the Government of India, has been criticised—as open to grave misapprehension. It is said that he should have remained at Kabul to furnish a base for General Roberts’ Kandahar advancing force ; that the withdrawal immediately after the defeat at Maiwand could only be attributed, both by the natives of Afghanistan and India, to fear. It certainly did not occur to any of us at Kabul that our retirement should be so misinterpreted, when at that very moment a large force was starting, not to India, but to march, heedless of opposition, through the heart of Afghanistan from Kabul to Kandahar. The criticism is as foolish as it is unworthy of Englishmen. As to remaining to support General Roberts’ advance, he might as reasonably have been detained to support our retirement. General Stewart with his characteristic generosity, had given him the pick of the Kabul regiments (hear, hear), and he had a stronger fighting force than that which remained behind encumbered with the transport, sick, followers, and stores, both of the Kandahar and Kabul armies. Further, we knew with absolute certainty, that there would be no opposition to General Roberts on this side of Ghazni or at Ghazni itself, while it was even improbable that there would be any on this side of Khelat-i-Ghilzai. We also believed that if there were opposition it would make very little difference (cheers). It was not for us at Kabul who were intimately acquainted with General Roberts and his Brigadiers, Generals Macpherson, Baker, and MacGregor, who knew the gallant spirit of the officers and the splendid material of the regiments chosen, British and native, to doubt for a moment the success of a force which, led by such Generals and composed of such men, could march from one end of Asia to the other (prolonged cheers). The reverse at Maiwand did not thus advance or retard the withdrawal from Kabul by a single day, nor was there any reason that it should. We withdrew because it had long before been decided to do so when an Amir had been recognized by the Government. lest by remaining we might destroy our own work. Abdul Rahman Khan having been recognized as Amir, our withdrawal was necessitated by every consideration of sound policy. If he had come to Kabul with the British army, he would have at once become unpopular as a creature of the Government supported by British bayonets, and he would have fallen on our retirement. Between the soldiers and his people

conflicts would have been unavoidable. Disputes on questions of jurisdiction would have arisen, the country would have again become excited, and we should undoubtedly have had to occupy Kabul for another winter, or retire at an unfavourable season through a hostile, instead of as now friendly population. Gentlemen, what do our critics want? What would they have done in our place? If they say annexation, then I can only thank God that the destinies of the country are not yet entrusted to the hands of crack brained enthusiasts who fancy it a high and imperial policy for the Government to drag its coat through Asia for barbarians to trample on (cheers).

This is the last time that I shall speak as an official of the Punjab Government, so you will forgive me if I make a last confession of political faith. I have for the last 12 years been perhaps as intimately concerned with frontier and all Afghan politics as any one now in India, and I leave the Punjab with an unshaken conviction that the foreign policy of my friend and master, Lord Lawrence, is the only sound one (hear, hear). His views are called obsolete, but the principle which inspires them is of truth and common sense, and the reputation of Lord Lawrence will live when the noise of his detractors has been long forgotten. "Masterly inactivity," which, by the way, is a phrase which was known long before Lord Lawrence's time, is, rightly understood, the proper foreign policy for India. It does not signify national humiliation or indifference to the national honour. Masterly inactivity abroad means masterly activity at home, the development of the country, lightened taxation, and the general prosperity of the people. India cannot enjoy both military glory and internal progress, and if she will stretch forward to grasp the soldier's laurels she will assuredly find her hand filled only with thistles.

It is not fair to compress a policy into an epithet. Suppose, for example, I were to dissect the "scientific frontier" which I hope will ere long be swept, with narrow gauge railways and Wynaad gold mines, into that limbo where all Indian rubbish is treasured (laughter and cheers). Gentlemen, our scientific frontier is not the Indus. It is not any mountain range stretching from the Khaiber to the Safed Koh, and from the Safed Koh to the Hindu Khush, and from the Hindu Khush to bankruptcy (laughter). The scientific frontier of India, the only one which is worth having, is to be found in the strong arms and the brave hearts of a loyal and contented people. Sikhs, Punjabis, Mussalmans, Dogras, and Gurkhas, what do you wish more? These troops, led by British officers and supported by and excited to a noble rivalry by British soldiers, will scatter like chaff any

army which any power, European or Asiatic, can ever bring against you."

The importance of this speech cannot be overrated, coming as it does, from one specially charged by the Indian Government with the direction of political events in Afghanistan; and who may thus be supposed to be in full possession of the intentions of the Imperial Government regarding the northern frontier of India. Notwithstanding the very laudable and peaceful sentiments summarised by the terms "masterly inactivity" embodying, when "rightly understood, the proper foreign policy for India," we venture to think, that in spite of themselves, the future rulers of India, and it may be the present generation, will find events, over which they can exercise but a feeble control, too many for them, will find themselves face to face with circumstances which will compel them to act vigorously, and extend their borders through Afghanistan: and settle the future of British supremacy in Asia, in a great war waged, not only in Central Asia, but on the high seas of the world, and in a detailed defence of British colonies, dependencies, settlements, and interests in every part of the globe. All history proves, and the history of the growth of English rule in India is full of the instructive lesson, that even when least disposed for war or annexation, two warlike powers at different stages in civilization, the one strong, united, and aggressive, the other split up into clan factions and petty chiefdoms, held together only by the strong dominant will of one family, or one ruler, cannot have counterminous borders and frontier relationship, without the representatives of either gradually evolving difficulties out of the routine of their respective duties which require to be referred to, and dealt with by the governments of each. Even when friendly relations exist between countries so circumstanced; and there is no danger of rupture, because each is the refuge of frontier robbers and cut-throats harassing each in turn, then that energy, ambition, and desire to maintain and have acknowledged what is believed to be the dignity and prestige of the more civilized and aggressive power, which frequently marks the career of able frontier officers, are sure in the end to lead to complications resulting in war and conquest. This at least has been the course of affairs ever since the rule of "The Company" began. No ruler of India ever left the shores of England with more peaceful intentions, or with stronger determinations to avoid war and annexation, and to consolidate and build up the already-existing British possessions, than Lord Dalhousie. When the news of the outbreak in the Punjab reached Calcutta, Lord Dalhousie gave expression, to the memorable words, remarkable alike for his own fixed determination to

maintain peace at all hazards ; and for the equally strong resolve, peace being impossible, to make war sharp, decisive, and vengeful. "I have wished for peace ; I have longed for it ; I have striven for " it ; but if the enemies of India desire war, then...they shall have " it with a vengeance." During the eighteen years of this peacefully intentioned Governor-General—1848-1856—the Punjab and Oudh were annexed, the second Burmese was fought, and Tanjore and Nagpur reverted to the British.

The Political theory of "masterly inactivity" has again been reverted to, after a trial of another political theory, which was activity, doubtfully masterly ; but we venture to think, that the passious, interests, ambitions, and aggressive energy of races are greater than theories or policies ; and will in the end sweep these aside, and the strongest and most enduring race will at last assert its supremacy over the other. The Afghan problem is not solved ; it has only been laid aside in weariness, and it may be disgust, by the present generation, to be taken up, either in the near or remote future with fresh complications and entanglements, when theories and policies will be scattered to the winds ; and the task of subjugation entered on. So far as the diplomatic treatment of the earlier stages of what resulted in the second and third Afghan wars is concerned, the Imperial Government had in Lord Lytton a man, eminently skilled from boyhood in all the wiles of Court intrigues, and State diplomacy ; and who did for the Afghan question, all that diplomacy could do—and failed : failed, that is, to avert war ; though the party who nominated him to his high office may claim, that the present interregnum of hostilities with Afghanistan is in some measure due to the policy of Lord Lytton, to seek out a strong ruler for the Afghans, friendly to Britain ; but in our estimation, it is simply a question of time, till as we have said, race antipathy, commercial enterprise, the restless energy of ambitious men, and the accumulating events of years shall re-upon the whole question of Afghan annexation, and the domination of England in Central Asia.

Much has been recently said, regarding the holding of Candahar and the problematical policy of the Government ; and calculations have been gone into concerning the great expense of retaining, even for a short time, that citidal. In our estimation Candahar is an outpost beyond the frontier of India, the holding of which implies that it must first be attacked by an army originating either from Herat or Turkestan, or elsewhere, that desires to avoid Cabul in its march on India. In the event of hostilities, the war is waged, not in Indian possessions, but in districts lying amid hostile tribes, who will thus suffer all the penalties

of war, and whatever these entail, war in short is carried into, and sustained in localities unfriendly to British rule, and this in itself is no small gain, to be paid for liberally, even at the cost of garrisoning Candahar. If, on the other hand, it is maintained that the presence of a British force at Candahar is a source of irritation and unrest to Afghan tribes and rule, this argument can tell only, in a position of affairs which at present has no existence. There is no united Afghanistan, lying docile under the strong hand of one ruler or one tribe. There is a struggle for mastery going on, and the British choose, and choose wisely, to support the authority of that ruler which is friendly to England, and likely to maintain his position of acknowledged supremacy amongst conflicting Afghan chiefs. The retention of Candahar implies the comparative security of Western and Southern Afghanistan from the attack of chiefs hostile to the ruler at Cabul, until such time as he shall be sufficiently strong to nominate and support a ruler there, and render the presence of a permanent British force unnecessary. The force which a strong ruler could place at Candahar, or the elevation of Southern and Western Afghanistan to a position independent of the North and East, yet friendly to Britain, will, in either case, secure the best interests of Afghanistan and the safety of the Northern frontier of India. No doubt the true safeguard of a nation is the loyalty of its subjects, and that wanting this there is no physical barrier or frontier, however well chosen and fortified, though this is not by any means an unconsiderable factor, will ever maintain in entirety and security, the possessions of any nation or people or tribe; but when an Indian statesman, if we may be permitted so to term Mr. Lepel Griffin, high in the confidence of the Imperial Government, makes the public declaration that the true frontiers of India are the loyalty of the various races inhabiting the northern and western portions, of the Peninsula of Hindostan, backed by British pluck and valour, there must have been temporarily obliterated from his memory, the whole history of the subjugation of India by the English. There was a time even in the memory of men living, when the whole Punjab and Oudh presented the same aspect of hostility and chronic unrest to British rule, which the Afghanistan of to-day does to the English rulers of this generation. Bit by bit the rule of the English in Asia has been extended, under circumstances, in every respect analogous to the events which have marked the relationships of Afghanistan and England during the last fifty years. What reason is there to believe, that the result will be different in Afghanistan, to what it has been in the case of the warlike tribes by Northern

India? or, that the hardy tribes of Afghanistan may not, in time, be as loyal a safeguard to the empire of England in Asia as the tribes of the Punjab are to-day?

Neither England nor Russia can avoid the inevitable. Both will go on, in spite of theories and policies, impelled by forces inherent in race characteristics, to conquest and annexation, till they come directly in contact, and then will come, sooner or later, the struggle for mastery, and the supremacy of the strongest. In our estimation, the present interlude of "peace and good will" is but a lull before the gathering storm, a storm that will tax to the uttermost, the might and brain of England, the valour of her soldiers, the loyalty of her subject races, the resources of her empire, and settle for some time at least, it may not be for ever, the supremacy of the English race in Asia and the world.

The remainder of the 60th Regiment, 15 officers and 150 non-commission officers and men, left Kandahar on October 1st, Generals Primrose and Burrows, with the whole staff and officers of the Garrison saw the Regiment off. General Primrose, addressed the men and paid a high tribute to their devotion to duty at Maiwand. They were played out of the city by the bands of the 7th Fusiliers and the 4th Rifles, and at Quetta, Pér Chowkey Bombay and Kurrachee they were received hospitably, and with all honours.

The tour of the Viceroy and the Lahore Durbar have engaged considerable attention; and the various speeches made by Lord Ripon, have been widely read and discussed. We subjoin an account of the camps at Lahore from the *Civil and Military Gazette*, and two of the Viceroy's speeches, the one to the troops in which he announced that the Government had sanctioned six clasps for Ali Musjid, Peiwar Kotal, Charasiah, Kabul, Ahmed Kheyl, and Kandahar, and a star for General Roberts' march, the other delivered at the close of the Lahore Durbar.

"The various camps, although laid out on somewhat the same plan, present individual differences in many small ways, but we shall content ourselves with describing one, that of the Maharajah of Cashmere, merely mentioning anything in the other camps which is, so far as the present assemblage goes, unique. The camp of His Highness the Maharajah of Cashmere is divided down its centre by a broad street, with rows of lamps placed along it at regular intervals; on either side are lines of European shaped tents with some cavalry, infantry, and half a battery of artillery on either flank. At the bottom of the main street is a large square, surrounded by *kanats* made of a brilliant scarlet cloth, with upright bands of scarlet and yellow, arranged chevron-wise. These *kanats* are lined on their inner side with a quiet

brown, liberally and tastefully embroidered in Cashmere fashion. This square is entered through a lofty *shumianah* made of the same colours and materials as the *kanats*, and arranged as a porch. In the centre of the side of the enclosure facing the entrance is pitched the Maharajah's grand Durbar tent, a splendid specimen of a moveable dwelling. Its outside cloths are of scarlet and a rich golden yellow, while within it is lined, sides, roof, and doors, with a chocolate brown, embroidered profusely with coloured silks worked in the well-known and handsome patterns of Cashmere. The columns of the tent are richly silvered and hung with circles of glass chandeliers for wax candles; the front of the tent is open, and the large space outside it,—but within the enclosure—is carpeted with durries, and over them is spread a rich scarlet cloth with devices on a brilliant yellow, toned down with black and richly embroidered in colours. Within the tent itself the floor is covered with white carpets, beautifully fine, and like everything else profusely embroidered and ornamented. At the back of the Durbar tent are two round chairs, thickly plated with gold wrought in all the beautiful and fantastic patterns that we know so well as coming from the Happy Valley. These chairs, or thrones, as they may almost be termed, are circular in shape, and of beautiful design. The cushions are of leather, so heavily worked with gold that the original fabric can only be seen on close examination. Two footstools to match the chairs are placed in front of them, and on either side come arm chairs of silver gilt, and these are succeeded by silver ones, all worked and ornamented profusely and delicately. Beyond these, stretching away in two long curves, are a row of chairs covered with the beautiful *nikash* work for which Cashmere is famous. The Maharajah of Patiala has the main street leading down to his tent laid out as a beautiful garden. His tents are of scarlet, black, and white, the three colours being beautifully blended. In H. H.'s Durbar tent is an extremely handsome *baradari* of silver, and also a number of pictures of past and present rulers in India, and portraits of some of the durbaries of the State. This Prince has, like Cashmere, brought a battery of artillery. Between the Rajahs of Nabha and Jhind, there exists a rivalry as to which shall make the grandest show on occasions like the present, and in this foolish endeavour to surpass each other, hitherto, H. H. of Nabha has had rather the best of it. H. H. of Jhind, however, has probably turned the tables on the present occasion; and to make his magnificence assured, has brought down a most wonderful vehicle, no less than a phaeton of silver. This carriage is of a very elegant design and of imposing size. It may be described as a high and a large phaeton body, with

a lofty coach-box in front, and a smaller body, hooded like the larger one, behind. The hood is of patent leather, and the seats are of dark blue velvet, thickly embroidered with gold. The rest of the carriage is silver with, we presume, a wooden foundation, although the natives insist that it is solid metal. The screws are of brass, and they, and various mouldings of the carriage, are richly gilt. The lines on which the carriage is built are good, and it is as handsome as it must have been costly. The Rajah of Jhind's tent will be lighted with gas. The exterior of the Rajah of Nabha's camp is not beautiful in the day light, but as the entrance has evidently been designed with a view of illuminations, it is not fair to give an opinion on it, until we have seen it lighted up. The usual incongruities that we are accustomed to at native pageants are, of course, apparent. In a Rajah's train the first carriage is always more or less well appointed, and then his attendants' dresses, his carriages, horses, and trappings gradually become shabby and poor, until the procession that was headed by so brilliant an equipage is closed by a veritable tag-rag and bob-tail.

Lahore, 13th November 1880.

The following is the Viceroy's speech to Sir Frederick Haines and the troops this morning :—" It has been a very great pleasure, indeed, that we have the honor of meeting on this occasion the worthy representatives of the British army, Europeans and Natives, present to-day, especially we who have been, as it were, thus introduced to our army of India under your auspices. It would be impertinent that we, as civilians, should express any opinion upon the bearing and appearance of the troops, yet I cannot resist the impulse which prompts me to say how greatly I have been impressed to-day by the sight which has been presented to me by them, of the discipline and power of the troops of our Queen-Empress upon this Indian soil, whether those sent from England or raised in this country. But Your Excellency, if I am bound to abstain from the criticism, which you might regard out of place, I may be permitted to refer to the acts which have entered into the domain of history, and for a few moments briefly recall the actions of the force we have seen to-day, in the most trying periods of a war just brought to a conclusion. We may well be proud of that which history will have to tell to future generations of the deeds of the British army during that war, whether we look upon that earlier and shorter campaign which is marked by the actions of Ali Masjid and Peiwar Kotal, or whether we look upon those events which followed that dark and melancholy occurrence at Kabul, when

the representatives of Her Majesty's Government fell a victim to a treacherous attack. There, when the soldiers of England, to vindicate the honour of their country, marched to Kabul, and nobly did they do their work, there will stand recorded in the pages of the military history of India the noble deeds they did there. Then there came a later period of the campaign, when the Government of India called upon the force under the command of my gallant friend, Sir Donald Stewart, to accomplish the march from Kandahar to Kabul in the midst of which he again encountered the foe at odds at which the British troops were wont to meet their enemies in this country. For, I believe, in the lines at Ahmed Kheyl, he had not more than twelve hundred men to meet some fifteen thousand of the enemy. And then we hoped that we saw before us the dawn of peace and a speedy return to their homes of the native troops of India. But again another circumstance arose which called for great exertion at the hands of the British army, and the hopes of the return of the force and of a satisfactory peace were for a time dashed aside, and we had to call upon the army in Afghanistan to retrace their steps from Kabul to Kandahar. The history of that great march I need not remind you of. I wrote to Sir F. Roberts when he started from Kabul, and told him I had no doubt his march would be famous in history. Was I wrong, gentlemen? The trade of a prophet is generally a dangerous one, but at least on this occasion the prophecy was amply fulfilled. That great march nobly accomplished, its speed and skill have attracted the admiration, not only of Englishmen, but of continental military critics, was wound up by a battle which may, it is hoped, have a lasting effect. Gentlemen, these are great deeds which Englishmen may justly be proud of, and I have more than once had the pleasing duty of assuring the troops of the great sympathy Her Majesty felt for them in the dark hours which have, from time to time, overshadowed us, and of the gratitude and joy with which she had heard of their successes by which the war was brought to a termination. But, Sir, if we recall with pride these gallant and stirring deeds of war and victory, there have been other incidents in these operations which I cannot, in justice, overlook. I cannot forget the services rendered me by those officers and regiments who were set to guard the lines of communications, and I hold, as I have already had occasion to state, that gratitude is equally due to those who performed that duty with such unvarying patience, such firmness under difficulties and trials, quite as great as those undergone by their comrades who had the better fortune to be engaged in the front. There is one other circumstance to which I should desire to advert on

this occasion, and one which I, at all events, am deeply proud to have heard from all hands, especially from Sir Donald Stewart, of the admirable discipline which has been maintained by the British army, when occupying a foreign country. They have given, during the term of their occupation, the greatest proof they can give of the true character of Englishmen, and I believe by that discipline, moderation, and justice towards the people of those countries in which they were stationed, they have done as much for the fame, reputation, and honor of England in a political point of view, as they have in the military by the victories they gained. It would be too long on this occasion to recount the acts of individual regiments, but I venture to say this, that a finer force of Her Majesty's troops has seldom, if ever, been brought together upon the plains of India. That artillery, whose fame is known in all lands, whose motto shows they are ready to do their duty in every part of the world, those magnificent cavalry regiments which we have seen on this occasion, that splendid line of unbroken infantry, I venture to think, Sir, you would not fear to lead against any army in the world. Sir Frederick Haines, I have on this occasion a duty of a singularly pleasant nature to perform. It was known to Her Majesty that this review was about to take place to-day, and, last night, I received a telegram from the Secretary of State desiring me to inform the troops assembled here that, it was Her Majesty's pleasure, in addition to the medal which has already been granted for the Afghan campaign, to attach to that decoration clasps for six different actions, Ali Masjid, Peiwar Kotal, Charasiah, Kabul, Ahmed Kheyl, Kandahar, and yet more, Sir, in accordance with your recommendation, the grant of a special decoration to those who took part in the march of Sir Frederick Roberts' force to Kandahar, in the form of a bronze star. I am confident that you and the troops under your command will recognize this concession on the part of the Queen-Empress, as another proof of Her Majesty's regard and affection for her army, which forms the foundations of her country's greatness and power, and as an incentive to deeds, such as you and your troops have performed so loyally and well, and for which, in the name of Her Majesty I now thank you from the bottom of my heart."

Viceroy's Camp, 15th November 1880.

At the close of the Lahore Darbar this day, His Exeellency the Viceroy spoke as follows:—"Maharajahs, Rajahs, Chiefs, and Gentlemen of the Panjab—It is to me a source of sincere gratification to have an opportunity of meeting in the capital of this pro-

vince so soon after my assumption of the office of Viceroy, the leading chiefs and so large and influential a representation of the people of the country. With some of you I was already acquainted, others I meet now for the first time, but to all I offer a hearty welcome. I have been very glad to observe during my passage through the province many signs of progress and prosperity, and I have received much pleasure from the friendly and cordial reception which has been accorded to me. The well-being of India very largely depends upon the state of agriculture; and upon the condition of those whose interests are connected with the land; and it is therefore very satisfactory to me, to be informed that, in this part of the country questions affecting those interests have been placed, so far as the administration can place them, upon a sound footing. I believe that, throughout the Panjab the land-tenures of every district have been carefully examined, defined, and recorded, and that the assessments of the whole revenue has been settled upon a fair basis for a term of years, calculated to afford free scope to the development of the resources of the province, and to the enterprise of its people. Special attention has been paid by the Panjab Government to the adjustment of the tenure of land along the north-west frontier, so that the duties of watch and ward, which have been so long, and, on the whole, so well performed by the chiefs and landholders on that exposed border, may be duly acknowledged and recompensed. The extension of the Panjab railways must have a marked effect, both on agriculture and on trade. We have now two lines traversing the province, one already completed, and connecting the Panjab with the sea, and the other to Peshawar nearly finished, and forming the great high road from Central Asia to the heart of India. These railways open out remote districts, promote internal communication, and strengthen the defences of the empire. I have learnt with great pleasure that education is spreading among all classes, and that the people of the Panjab are giving proof of their capacity for mental training and their appreciation of its advantages. I trust that the real aim of higher education will be kept steadily in view, and that it will be directed, not to separate classes by difference of culture, or by an undue desire to introduce foreign ideas and habits of thought, but to throw open to all a common ground for intellectual development; and to preserve and improve whatever is good in the indigenous literature of the country. All that I have seen appears to me to indicate the steady growth of reciprocal relations of friendships and confidence between the Chiefs and the Supreme Government; and to show forth the attachment and devotion of the chiefs to our Queen-Empress, and the complete trust which the Government

can place in them for all services, which they are so well qualified to render. No better proof of this can be found than their readiness to aid in the late war; and the excellent spirit shown by their sirdars and officers, as well as by their troops. The loyal co-operation of these chiefs, and the conduct of their contingents have, by the gracious permission of Her Majesty, been recognised in various ways, by decorations and titular distinctions; and the Government of India are also fully prepared to mark by substantial and public tokens of approval, the services of other sirdars and native gentlemen who have accompanied our troops and our officers; or have in other ways given signal marks of their ability and their devotion in the performance of the several duties assigned to them. Her Majesty the Queen-Empress has commanded me to convey to the chiefs of India, her warm interest in their welfare; and not in their personal welfare alone, but in the success of their administration, and in the well-being of the people of their States. For it is well known, and should be everywhere understood, that the British Government always entertains, not only a desire for the honor and advantage of the chiefs, but also a deep solicitude for their subjects; and that we measure the greatness of a State and the degree of its prosperity, not so much by the brilliancy of its Court, or even by the power and perfection of its army, as by the happiness and contentment of the people of every class. It is my earnest hope that, the chiefs now assembled around me will remember this; and that they will continue to administer their hereditary dominions, the possession of which is secured to them under Her Majesty's Empire, with justice and moderation; being careful to retain the affection of their people, and even to introduce necessary reforms with moderation; for when disorders arise, the British Government will judge that evils have crept in, which require remedy. The population of the Panjab may be justly congratulated upon the manner in which they have utilised the advantages of a generation of peace under our rule, without losing their tradition of hardihood or their aptitude for military service. The general spirit of a people is reflected in its army, and whatever benefits the British Government may have been enabled, through God's assistance, to bestow on the Panjab, it could not have realised a better return than it has received in the untiring endurance and devoted courage displayed under circumstances, especially trying to native troops, by the Panjab regiments who have served during the last two years in Afghanistan. Maharajas, Rajas, Chiefs, and Gentlemen,—it has given me great pleasure to have this opportunity of addressing you in public Darbar. I believe that no such Darbar has been held in Lahore by the Viceroy since 1864, when Lord Lawrence spoke to the chiefs assembled

around him in their own language. Unhappily I am not able to follow his example in that respect, neither can I present myself to you, as he did, as an old friend and trusted guide ; but having enjoyed the friendship of that great man for many years, and being animated by sentiments of the heartiest admiration for him, it will be my constant endeavour during my administration of Indian affairs, to walk in his footsteps, and to apply his principles ; and I know well, that I could not give you here in the Panjab, a better assurance than by this declaration of my earnest desire to promote your prosperity and advance your welfare to the utmost."

Various rumours have been current during the quarter regarding Afghan affairs, all more or less unreliable. Abdur Rahman seems quietly consolidating his position. Ayub Khan at Herat is reported to have a force of three regiments, those he left behind him when he marched on Kandahar, and from the fragments of his army shattered in its encounter with the troops under General Roberts he has formed other two, composed chiefly of men whose wives are at Herat. There are a number of guns ; but one battery only has carriages. Ayub is reported to be collecting and manufacturing arms ; it is also stated that a large quantity of his family jewels have been sent to Meshed to be exchanged for coin ; and that three of his agents, sent to Persia to ask for assistance, have been ordered by the Shah to go on to Tcheran. General Hume is now in command of Kandahar, the garrison of which is composed of half Bombay and half Bengal troops. It is stated on good authority that Kandahar will be evacuated, and the whole British force return to India.

A new factor in the central Asian problem has turned up in the incursion of the Kurds, 20,000 strong headed by Obeidullah on the north-western frontier of Persia. For the last two hundred years the Kurds have held the chief military positions of northern Persia, such as Astrabad, Bujnurd, Kuchan, Dereguez, Kelat, Sarakhas ; and between them and the Tekke-Turkomans there has been deadly enmity for the last two centuries. The Russians were, last year on their march on Merv, defeated and driven back by the Tekke-Turkomans. There is another and an easier route to Merv, through districts capable of yielding the most abundant supplies on a campaign, and presenting few physical difficulties to an invading army. That route is through the countries held by the Kurds, along the valley of the Attrek to Kuchan, Meshed, and Herat. Turkish and Persian Kurds have been systematically cultivated by Russia ; and when it is deemed advisable to move in the direction of the Attrek, the army of Russia will find itself in the midst of a friendly people ready to support and facilitate its movements.

POSTSCRIPT.

IN view of the abandonment of Kandahar by the Government. Sardar Shere Ali Khán, late Wali of Kaudahar, is making arrangements for leaving the city and taking up his residence in India. Conflicting reports regarding the Kurdish rising are in circulation, the latest is, that Russian troops have been withdrawn from the frontier of Persia. The illness of the Viceroy for some time was a cause of considerable anxiety. He has been laid up at Allahabad with a severe attack of intermittent fever, and is now happily in a fair way of recovery. Sir Donald Stewart succeeds Sir Fredrick Haines as Commander-in-Chief.

The Santhals, one of the few aboriginal tribes of India, are at present in a state of ferment; and fears are entertained of a rising of some sort amongst them. The sub-division of Jamtara seems to be the centre of disaffection. Preparation for the forthcoming census appear to be, if not the cause, at least the occasion of considerable excitement; and the Deputy Magistrate's house at Jamtara has been burned to the ground. An arrest had been made of some Santhals who were instigating an opposition to the taking of the census; and the bungalow was fired the same night. We quote the following from the *Englishman*:—

No further act of violence is reported from Jamtara or the disturbed neighbourhood. It is, indeed, expected that whatever may be their purposes and plans, the Santáls are not likely to commit themselves to any overt act at least for the next fortnight or so. Early in January, however, takes place the *Bandhna* festivals, one of the great national festivals of the people. The Santháls gather together in very large bodies to celebrate the occasion, and natural apprehensions are felt as to the consequences of their gathering in crowds like this in their present frame of mind. Some rash and thoughtless act on the part of some mischief-monger or evilly-disposed person, during this time, may, it is very justly feared, precipitate a disaster. Should the festival be got over without any disturbance, there is a prospect that the excitement will subside, at least for a time; for we fear that the present state of affairs at Jamtara is but the outcome of a long series of Santháli troubles, connected chiefly with the late land settlements. Every precaution is being taken to provide against any outbreak during the *Bandhna* festival, and to restore order. Strong police reinforcements have been sent and are still being forwarded to all stations throughout the Parganá. Strong bodies of the railway police have been put on guard on the line and stations in these parts. On Saturday a more efficacious proceeding was resolved upon. It was determined to

send up a detachment of troops to Jaintara and to march them through the country thence to Naya Dumka. It is thought that this course will exercise a sobering influence on the unruly spirits among the Santháls. A similar measure was adopted in 1871, when signs of a Santháli outbreak appeared at Nya Dumka. On that occasion troops were marched through the heart of the Santhál Parganáas, from Bhagalpur to Nya Dumka, with the very best results.

December 31st, 1880.

CRITICAL NOTICES.

GENERAL LITERATURE.

A Digest of Civil Law for the Punjab, chiefly based on the Customary Law as at present judicially ascertained, by W. H. Rattigan (Lincoln's Inn), Barrister-at-Law. Allahabad: Printed at the Office of the *Pioneer*.

LAW, either digested or set forth in detail, is, as a rule, not by any means fascinating reading for the bulk of men, yet we venture to think, that Mr. W. H. Rattigan's *Digest of Punjab customary law* will be found interesting reading, not only to students of law, but to students of human nature everywhere; and to all who care to learn in a succinct form something of the unwritten common law of a large section of the Indian people—law which has survived through ages; and remained almost unchanged amid the change, decay, and overthrow of successive dynasties to the present day. Mr. W. H. Rattigan has brought together and systematized a vast fund of legal knowledge, based on the customary law of the Punjab, and the decision of the chief court, reported and unreported, on such subjects as succession, alienation, marriage, tenure of land, adoption, and others, of a like nature, all of them bearing intimately on the social conditions and habits of the people, which will do more to throw light on, and spread knowledge regarding, the people of the north-west of India than many books much more pretentious.

One of the chief charms of this *Digest* is, that the statements are brief and clear, entirely destitute of circumlocution, and each statement is backed up by an array of authorities and illustrations, which are of the highest value, not only as guides to the legal practitioner, but as sources of information to all, students who desire to acquire a knowledge of what after all, is in some respects one of the most important subjects of study, *viz.*, the social barriers within which a people have existed, even when written law and authority were overturned in anarchy, and the rule of the

strongest trampled in the dust political and legal rights. Mr. Rattigan says in his preface:—"It had long been felt by those best acquainted with the habits and customs of the rural population, that neither the *shara* nor the *shastras* really exercised any direct influence among them in regard to such matters (matters pertaining to the domain of private rights); and it was also known that the Hindu and Muhammedan, though differing in religion, were often united together in the village community, as it was natural they should be, by the same common rules regarding the devolution and disposal of property, which in theory and frequently in practice was recognized as involving a community of interests." To put these customary laws in the form of a few simple propositions, including rules that, it is believed will be accepted by Hindu and Muhammedan alike, is the task which Mr. Rattigan has set before him, with the ulterior object of assisting any future effort to reduce to a more or less definite code, the whole customary laws of the Punjab. So far as the present work goes, and it is a supplement to, and further Digest of principles enunciated "in the larger treatise which was the joint production of Mr. Justice Boulnois" and the author, it is an eminently successful piece of work which reflects great credit on the acumen, skill, and research of Mr. Rattigan, who has in this volume reduced to small compass, something like fifteen years' notes of cases carefully investigated, and supplemented the whole with copious reference to authorities and with apt illustrations. We quote the following from the tenth chapter:—"The village Common Land," as a fair example of the power of condensation and clearness of statement which characterises the Digest. At the same time it exhibits the tenacity with which rights on common lands in Northern India have been held and guarded.

The Village Common Land.

190.—Comprises the *Shamilat-deh*, including the uncultivated (*banjar*) and pasture lands, the *abadi* or inhabited village sites, and the *Gora-deh* or vacant space reserved for extension of the village dwellings and adjoining the village site.

191.—As a general rule, only proprietors of the village *malikan-deh* as distinguished from proprietors of their own holdings (*Malikan-Nakbuza Khud*) are entitled to share in the *Shamilat-deh*.

192.—In the absence of custom none of the proprietors can do anything which alters the condition of the joint-property without the consent of all the co-sharers.

193.—Nor can any individual proprietor plant or cut trees on common land, or sink a well, except with such consent.

194.—Nor in the absence of custom can the will of the majority of a village community prevail against that of the minority, when the question is one as to the disposal of the common property in such a way, as to preclude all use of it by the owners."

This is but a fraction of the chapter, and we have omitted the exceptions, authorities, and illustrations, which alone can give any idea of the learning and research, that Mr. Rattigan has expended on his *Digest of Civil Law for the Punjab*.

The Life, Times, and Correspondence of the Right Rev. Dr. Doyle, Bishop of Kildare and Leighlin, by W. J. Fitz Patrick, L.L.D., M.R.I.A., &c., Dublin: M. H. Gill and Son, 50, Upper Sackville Street; & London, James Duffy and Sons, Paternoster Row.

JAMES Doyle, Bishop of Kildare and Leighlin, was one of the noblest ecclesiastics that ever ruled an Irish Bishopric. He exhibited in his life, not only the highest qualities that have distinguished the greatest Churchman of the West, but he identified himself with the people of Ireland, and denounced the heavy grievances under which they had long suffered, with an eloquence and logical consistency, which won the admiration, not only of his own countrymen, and made his name a tower of strength for the Catholic party, but which earned for him the admiration even of his opponents. Born of an old and illustrious Irish family, which had been all but beggared by the cruelly unrighteous Penal Code, that for six hundred years trod the very heart's blood out of the Irish people; and of which woeful "sowing of the wind," the Ireland of to-day is reaping the blasting whirlwind, James Doyle, after receiving such education at the Ireland of last century could give to her sons, went to "The Little University" of Coimbra in Portugal, at the age of 19, in the year 1804; and laid there the foundation of that learning, and broad culture, and liberality which, during the whole course of his life, characterised the words, the thoughts, and the projects, of one of the greatest Irishman and truest patriots, that have ever laboured for freedom, toleration, equal rights, and the best interests of the Irish people.

On the invasion of Spain and Portugal, by Napoleon in 1807, and the flight of the Portuguese, royal family to Brazil, a *junta* was formed, and all ages and condition were enrolled to oppose the French. Not the least active amongst the volunteers were the students of Coimbra; and few of them shouldered the musket, drilled and went on guard, with greater alacrity than James Doyle and his fellow student from Ireland, Austen, McDermot, both

of whom were able to perform important offices to the British force, that shortly afterwards landed at Cape Mondego with Sir Arthur Wellesley. On his return to Ireland he joined the Augustinian Convent at Ross; was ordained a priest; afterwards taught logic, rhetoric, and theology in Carlow College; and from thence was appointed to the united See of Kildare and Leighlin, which he occupied till his death in 1834, at the comparatively early age of forty-seven.

In the whole agitation and discussion that resulted in the Emancipation bill Dr. Doyle took a most effective part; the numerous letters he wrote on this and other subjects of great importance to Irishmen and Catholics signed J.K.L. (James Kildare, Leighlin), his powerful appeals from the pulpit and in pastorals to his own countrymen, his voluminous correspondence with some of the best known friends of the Irish people, and with his private friends, and his examination before the Committee of the House of Lords, these are all ably set forth at length by Mr. Fitz Patrick; and we venture to think that there is no book that will give a fuller, a more graphic, and a truer picture of Ireland, towards the close of last century and the first quarter of this, than Fitz Patrick's life of Bishop Doyle. Twenty years ago the same biographer gave to the world a life of Dr. Doyle; and after this long interval, during which he has worked, loving and enthusiastically at his subject, and accumulated much additional information and recovered numerous letters, this, the second edition, may be said to exhibit in the fullest detail that which it professes, *viz.*, the Life, Times, and Correspondence of one of the most notable Irish ecclesiastics, patriots, scholars and gentlemen of the early part of this century.

How keenly Dr. Doyle felt the wrongs of Ireland, and how truly he expressed them, may be judged from the following passage which those who know the state of matters in that unhappy country, as this century opened, will recognise as something more than mere rhetoric.

Vol. I., page '5, How often,' wrote Dr. Doyle in his *Letters on the State of Ireland*, "have I perceived in a congregation of some thousand persons, how the very mention of the "Penal Code" caused every eye to glisten, and every ear to stand erect; the very trumpet of the Last Judgment, if sounded, would not produce a more perfect stillness in any assembly of Irish peasantry, than a strong allusion to the wrongs we suffer"..... Vol. 1, page 37:—"I have read of the persecution of Nero, Dometian, Genseric and Attila, as well as of the barbarities of the sixteenth century, I have compared them with those inflicted in my own country, and I protest to God, that the latter in my opinion have exceeded in duration, extent, and intensity, all that has ever been

endured by mankind for justice sake. These Catholics are now emerging from this persecution, and.....the recollection of their past sufferings is far from being effaced. The comparative freedom which they enjoy is a relaxation of pressure rather than a rightful possession. As religionists they are suffered to exist, and the law restrains the persecutor but persecutes them of itself."

In the year 1822 when the foul and dastardly acts of secret societies, Orangemen and Ribbonmen alike, had in the fury of brutal religious intollerance given way to acts that were a disgrace to humanity, a pastoral of Dr. Doyle was read from the altar steps of every Chapel in his Diocese, and did more to quell the rising spirit of outrage and rebellion, than all the repressive measures of the English Government. We quote a passage or two. After laying down the principles of the Catholic Church in relation to the civil power and the then condition of Ireland, the pastoral goes on :—" And, now let me ask you how are your wants to be remedied and your distress removed by these associations? Is it by the breaking of canals? by the destroying of cattle? by burning houses, corn and hay, and establishing a reign of terror throughout the country that you are to obtain employment? Is it by rendering the farmer insecure in the possession of his property that you will induce him to increase his tillage? Is it by injuring canals and boats that you are to encourage trade? Is it by being leagued against the gentry that you will prevail on them to improve their houses and demesnes? Is it by causing a heavy police establishment to be quartered throughout the country, to be paid by taxes collected from the holders of land, that you will enable them to give you employment? No, your proceedings are only calculated to compell gentlemen to fly from the country, to convert their lands to pasture, and place an armed force to protect their cattle and to treat you, if necessary, with the utmost vigour. Your conspiracies therefore are calculated not to relieve but to augment your distress a hundred-fold."

Again, towards the close of his life when the peace of the country was imperilled, and firelocks were freely handled and the crash of civil war almost imminent, the following picture will give some idea of the influence exercised over the misguided peasantry by Dr. Doyle; and in this respect his example may well be followed in the present state of Ireland by the authorities of his Church.

Vol. II., page 409.—" It was a beautiful Sunday in September (1832). On the previous Sunday it was announced, that the Bishop would attend for the purpose of addressing the

Leaders and Partizans of the factions then known as Black and White feet. The chapel being small, it was at the same time signified to be the wish of the Bishop, that the women and children would absent themselves. The little chapel was situated in the bosom of a lovely valley, near it was the police station, a tavern, and some detached houses. On every side arose abrupt hills.....On the hillside at a distance were stationed a large body of police drawn up in military array. On every ditch that could command a view were to be seen groups of women and children, casting around looks of anxiety and alarm. Below in the churchyard surrounded by at least 9,000 men, on a tombstone and dressed in episcopal costume, cap, rochet, and with crozier grasped—stood J.K.L. (Dr. Doyle); at his feet in surplice and soutane were seated some half a dozen priests.

For two hours, and under a strong sun, did the successor of Conleth and Laserian address this vast multitude on the crime and evils flowing from secret societies. Perjury, drunkenness, robbery, murder, transportation and death—the wailings, desolation and ruin of broken-hearted widows and helpless orphans—the burdens and miseries of the country increase ten-fold—the blighted hope and frustrated labours of her best and truest sons—these were dwelt on with a force of expression and a pathos and sublimity of thought, and a command of language that was at once irresistible and at times astounding. Like a stream of burning lava issuing from some fresh crater, it carried away or consumed everything it touched: the hearts and eyes of all were softened. You might behold the big tears chasing each other down the rugged and blackened cheek of the colliers, many of whom came to mock but remained to pray. The effects of those appeals were instantaneous and incredible. Cart loads of arms, guns, pistols, and rusty swords were surrendered at the time and places appointed, whilst many of those misguided men whose consciousness were charred and battered as their faces, returned to habits of order and sobriety, and the observance of their religious duties.”

The evil, however, was too deep-rooted to be irradiate even by such appeals.

We believe this life of Dr. Doyle will be read with interest all the more deep, because of the unhappy state into which Irish disaffection seems under the guidance of unwise men likely to lead Ireland. Mr. Fitz Patrick has performed his work of biographer in a style that reflects high credit on his own long labours to rescue from forgetfulness one of the worthiest of Ireland's sons; and to transmit to posterity the memory and the worth of one who laboured incessantly for the truest interests of Ireland and her people.

The Industrial Arts of India, by George C. M. Birdwood, C.S.I., M.D., Edinburgh, Art Referee for the Indian Section of the South Kensington Museum ; with Maps and Wood-cuts. Published for the Committee of Council on Education, by Chapman and Hall, Limited, 193, Piccadilly.

IN the year 1878 Dr. Birdwood published a *handbook to the Indian Court* at the Paris Exhibition of 1879. The amount of information conveyed in this book, and the literary skill with which it was written earned for it a warm reception from the press of India and England. The present work of Dr. Birdwood is an amplification of this valuable handbook, carefully re-written, with additional matter from the administrative reports of the local Governments of India, and provincial gazetteers. The second part of *the Industrial Arts of India* is thus a republication, with large additions, of the author's handbook above mentioned ; and the first part is entirely devoted to a carefully written, and accurate account of the Hindu Pantheon, without some knowledge of which Dr. Birdwood says, "half the interest of the manual arts of India is lost." On the re-opening of the Indian Museum under its new administration by the Science and Art Department at South Kensington, Dr. Birdwood was asked to prepare a popular handbook on the industrial arts of India. The handbook is a very full and systematic account in detail of the manufacturing resources of India ; and the very wide and varied knowledge of the whole subject possessed by Dr. Birdwood, and the literary skill which marks the whole work renders it a very remarkable addition to the somewhat small number of books on this subject. The wood-cuts are numerous, well selected and carefully finished, and the map of India accompanying the volume is a clear and serviceable one. Here is what Dr. Birdwood says in his opening chapter about Indian Art.

"The arts of India are the illustration of the religious life of the Hindus, as that life was already organized in full perfection under the Code of Manu, B.C., 900—300. Although some of the freshness of its Vedic morning has been already lost, it is left still in its first religious and heroic stage, as we find it painted on the Ramáyana and Mahabharata ; and we owe its preservation, through the past three thousand years, from change and decay, chiefly to the Code of Manu. The principles of Government embodied in this book were probably first reduced to their present form B.C., 300, as a defence of the priestly Brahmins against the Buddhist revolution, by which it was threatened from about B.C., 543, the date of the death of Gautama Buddha, to the sixth and seventh centuries of our era. So securely was the sacerdotal State system of the Brah-

"minical Hindus fixed by the Code of Manu, that even the foreign
"invasions and conquests to which they have been constantly
"subjected from the seventh century B C, have left the life and
"arts of India essentially the same as we find them in the
"Ramáyana and Mahabharata, and in the writings of the Greek
"officers of Alexander, Seleucus, and the Ptolemies, by which
"they were first made known to the Western nations."

The intimate absorption of Hindu life in the unseen realities of man's spiritual consciousness is seldom sufficiently acknowledged by Europeans; and indeed cannot be fully comprehended by men whose belief in the supernatural has been destroyed by the prevailing material ideas of modern society. "Every thought, word, and deed of the Hindus belongs to the world of the unseen as well as of the seen; and nothing shows the more strikingly than the traditionary arts of India. Everything that is made is for direct religious use, or has some religious significance. The materials of which different articles are fashioned, the weight and the colours in which they are painted are fixed by religious rule. An obscurer symbolism than of material and colour is to be traced also in the forms of things, even for the merest domestic uses. Every detail of Indian decoration, Aryan or Turanian, has a religious meaning, and the arts of India will never be rightly understood, till there are brought to their study, not only the sensibility which can appreciate them at first sight, but a familiar acquaintances with the character and subjects of the religious poetry, national legends, and mythological scriptures that have always been their inspiration, and of which they are the perfected imagery."

Dr. Birdwood wisely and vigorously points out the dangers to which Indian art is subjected by the introduction, of European ideas and the manufacture of Indian art products, cheap, trashy, and degenerate, to meet the demand for orders, which weigh and measure art by the pound, the cubic contents, and the square yard. The contents of the book are very varied, all of them touched with a skill and fulness of information rarely to be met with. Amid much, that is singularly valuable, as a contribution to the history and delineation of Indian art, the two last chapters, those on Pottery, and the knop and flower pattern will be found highly interesting, especially the former, as giving a picture of the life and surroundings of the village potter a true Indian idyll—little known to the bulk of English-speaking people who have never resided in India.

Mathurá, a District Memoir, by F.S. Growse, B.C.S., M.A., Oxon., C.I.E.; Fellow of the Calcutta University. Second Edition: Illustrated, Revised and Enlarged, 1880. Printed at the North-Western Provinces and Oudh Government Press.

(Contributed.)

THIS Memoir forms one of the uniform series of local histories, which, according to a plan, suggested, we believe, by Sir W. Muir, when Lieutenant-Governor of the North-Western Provinces, was to have been compiled for each district. It is much to be regretted that this admirable plan appears to have fallen through; at least only four such Memoirs have been hitherto published: one of Bulandshahar, by the Deputy Collector, Rájá Laehlman Singh, another of Delira Doon, by Mr Williams of the Civil Service, and a third of Ghazipur, by Mr. Oldham, formerly Magistrate of that district. The fourth of the series is the present Memoir of Mathurá, by Mr. F.S. Growse, who for many years had been in charge of the Mathurá district. It is unquestionably, as was to be expected from the author's well-known scholarship and official experience, by far the fullest and most valuable volume of the series. While the other three Memoirs are mainly limited to giving statistical information, Mr. Growse's Memoir of Mathurá adds to this the most varied information on the history, archaeology, sociology, philology, &c., of the district. Indeed, the larger portion of the volume, about two-thirds of it, is devoted to these latter class of subjects. This is, as it should be; for to all but those who are district officers, the chief value and interest of the volume will be centred in its first part, which contains the extra-official information.

The present edition of the volume is the second; the first was published in 1874. During the interval much additional information was collected by Mr. Growse, which has been incorporated in the new edition. Some of it had been already published in various numbers of the journal of the Asiatic Society of Bengal.

The Memoir is divided into two parts: the first part contains twelve chapters, the first of which describes the physical aspect of the district, its people and their language. The second chapter narrates the history of modern Mathurá and its district, during the Muhammadan and English periods of India, from the year 1017 A.D. when Mahmud of Ghazni is said to have sacked Mathurá in his ninth invasion of India, down to 1857, the year of the great mutiny, when the city was saved mainly by the prudence and loyalty of its wealthy Seth bankers. The history of ancient Mathurá during the Buddhist and Brahmanic periods is detailed later on in the fifth chapter. In describing

the history of ancient and modern Mathurá, Mr. Growse has carefully collected all notices of the city that occur in Buddhist and Muhammadan literature, and has treated them very successfully.

He shows from the records of the Chinese pilgrims Fa Hian, and Hwen Tsang, that in the early centuries of the Christian era Mathurá was a flourishing Buddhist city, with a large number of Buddhist monasteries and relic-towers or *stupas*. The sites of most of the latter he has succeeded in identifying by the help of the numerous, though very fragmentary, archæological remains, the discovery and preservation of which are mainly due to him. "During the period of Muhammadan supremacy, the history of Mathurá is almost a total blank." That intensely idolatrous city was so abominable in the eyes of the Puritan Moslems, that they disdained even to use its name, and attempted—fortunately without success—to change it into Islámábád. The city had good reason to be thankful for this neglect; for whenever it succeeded in attracting the attention of its rulers, it was only to become an object of their fierce persecution. These two historical and archæological chapters are unquestionably among the best and most interesting of the Memoir. Though, indeed, it is difficult to single out any particular chapters for special praise, as the subject of almost every chapter has its own interest, and every one is treated by the author with a fullness and thoroughness which seemingly leaves nothing to be desired. One chapter, however, must not be passed over without special mention. It is the twelfth or last of the first part, and treats of "the etymology of local names in Northern India, as exemplified in the district of Mathurá." The subject is not altogether new; on the contrary, it has given rise to a vast number of speculations; but most of those hitherto put forth, have been of the most haphazard description. The present is the first attempt, on a larger scale, to attack the problem in a scientific spirit, and on consistent and well founded historical and grammatical principles. The general position that the author maintains is, that "local names in Upper India are, as a rule, of no very remote antiquity, and are *prima facie* referable to Sanskrit and Hindi, rather than to any other language," (p. 300). Mr. Growse very clearly proves this; and there can be no doubt that his view is perfectly correct. One thing impresses itself very clearly upon the mind in reading this chapter, that no one is competent to pronounce an opinion on the subject, unless he possesses an intimate and minute knowledge of the history of the locality, added to a thorough acquaintance with the phonetic laws that regulate the development of the modern Indian languages from the Prákrit and Sauskrit. Mr. Growse is one of the few that possess both these qualifications. Most of his

local derivations are undoubtedly correct ; for example, his identification of the common local ending *ol* or *oli* with Sanskrit *pura* or *puri* "town" (e.g., *Maholi-Mudhupuri*) ; *ot* or *oti* with *vat*, *vati* ; *othi* with *vosti*, etc. Much more doubtful is the derivation of the ending *on* or *wa* from Sanskrit *grāma*, which always appears in modern names as *gaum* or *gon*. Thus *Dhangaum* (or *Dhangawn*, as it is commonly spelt,) is *Dhanga-grāma* ; but *Bádon* is simply a corruption of *Badava*, but not of *Bádu-grāma*. This etymological chapter is one of those that have been added to the second edition of the Memoir. Not the least of these improvements being a large number of fine photographs and other illustrations of the most notable persons, buildings, and antiquities of Mathurá. Other additions are chapter IV., which contains probably the fullest and best description of the Holi festival hitherto published, chapter VIII. on the Vaishnava reformers, and almost the whole of chapter VII., which includes amongst other matters a sketch of the development of the local style of architecture.

It would be impossible within the space of a short review to do justice to the great mass of information distributed in the various chapters. The Memoir is a large quarto volume of upwards of 500 pages, and its external "get up" is creditable to the Government Press of Allahabad where it has been printed. Altogether the work is a model of what a district Memoir ought to be, and Mr. Growse is to be congratulated on the success which he has achieved.

Records of the Geological Survey of India, Vol. XIII, Part 4, 1880. To be had at the Geological Survey Office, Indian Museum ; at the Office of Superintendent Government Printing, Calcutta : London, Trübner & Co.

OF all climates in the world, India is probably one of the worst suited for the study of those various phenomena, which are classed under Geology. There are only a few months in the year, in the plains of India, unless in the very early morning, during which it is possible to do the practical work of surveying. The long pleasant days of a temperate climate are, here in India, replaced by the glare and heat of a tropical sun ; and the steady deluge of rains, and sudden tropical storms ; rendering it hazardous and trying for Europeans to spend more than the early morning hours, and the too brief cold season, in the open air. With all the disadvantages of climate, against them, the officers of the Geological Survey of India may fairly claim to have done their work, as carefully, systematically, and thorough-

ly, as any body of Government Geologist in the world; and the *records of the Geological Survey of India*, issued at intervals of about four months, February, May, August and November, are in every respect worthy of the men who conduct the Survey, and the Government that shows its wisdom and liberality in supporting it. We venture to think, that the records of the Survey are too little known by the bulk of the educated people of India, Native and European. It is quite true, that many of the papers printed in the Records, are probably of so technical a character, that their full import may only be understood and appreciated, by those who have given some attention to the study of Geology, this class of readers, we hope, is yearly increasing; but there are other articles in the records of the Geological Survey, which may be read with the deepest interest by those whose acquaintance with Geology is but of limited extent, or, for that matter, whose knowledge of Geology as a science amounts to nothing. For instance, in the present number the "*Note on Rich or Alkali soils, and saline well waters*," by W. Custer, M.B., Chemical Examiner, Punjab Government, and the article by H. B. Medlicott, M.A., of the Geological Survey on "*the Rich soils of Upper India*" are probably two of the most important scientific contributions that have recently made by any Government Department of India; dealing as they do, with the causes that have produced a solitary barren wilderness out of the once luxuriant Mesopotamia; and the relation which barren district of India bear to climatic causes.

The first article in the present number "*On some Pleistocene deposits of the Northern Punjab, and the evidence they afford of an extreme climate during a portion of that period*, by W. Theobald,"—has not, indeed, the same practical value as those already mentioned; but nevertheless, it is one of the most ably reasoned, and clearly written contributions to the discussion of Glacial Action, that has recently appeared. Mr. C. A. Hackett's *Useful Minerals of the Arwal region*, and the *Notes on the Correlation of the Gondwana Flora with that of the Australian coal bearing system*, by the Palaeontologist of the Survey, Mr. Ottokar Feistmantel, are articles of considerable importance. Probably, however, the article on the *Naini Tal Landslip* (18th September 1880), by R. D. Oldham, A.R.S.M., of the Geological Survey of India, will be read with the greatest interest. The *Records* are cheap at the money, rupees two a year for four numbers; and they ought to command a much wider sale here in India, than they apparently do. There may be Government records, reports, returns, &c., which it might be difficult to extract much useful information out of, but the *Records of the Geological Survey* deserve to be better known and more widely read.

Memorial to His Honour the Lieutenant-Governor of Bengal, with notes on the proposed Rent Law, &c., by the Behar Landholders' Association, Bankipore. Printed by Narain Chandar Chakrabarti, at the Behar Herald Press.

THIS is in effect, a plea for the substantive continuance of the "Permanent Settlement," on its original basis ; and is, on the whole, a very ably reasoned and exhaustive examination of the whole subject, from the point of view taken up by the landholders. The "Memorial" will, we have no doubt, be of considerable service, in aiding the recently appointed Rent Commission in its deliberations ; and should be read by all who have any interest in the land question.

A few notes on Hindi by Radhika Prasanna Mukherji, Calcutta. Printed by Pichay Lal Banerji at Messrs. J. G. Chatterji and Co.'s Press, 14 Amherst Street.

THIS pamphlet is in reality a criticism of an article, "A plea for the people's tongue," by Mr. George A. Grierson, which appeared in the July number of this *Review*. It advocates the position, that Book Hindi, and not the language as spoken by the bulk of the people, should be adopted by the courts of law in Behar.

Accounts relating to the Trade and Navigation of British India for the month of October 1880, and for the seven months, 1st April to 31st October 1880, compared with the corresponding period of the years 1878 and 1879, published by order of the Governor-General in Council, at the Office of the Superintendent of Government Printing, Calcutta.

THERE is here brought together a mass of figures relating to the Trade and Navigation of British India, which exhibits in a very tangible form the commercial prosperity of India. It seems to us, that publications of this sort, dealing as they do, with such a variety and multiplicity of imports and exports, if they are to be made available for ready reference, ought to have a much fuller table of contents, and be accompanied with an index.

Sketches of Army Life in Russia. By F. V. Greene, Lieutenant of Engineers, U. S. Army. Late Military Attaché to the U. S. Legation in St. Petersburg ; and Author of The Russian Army and its Campaign in Turkey in 1877-78. London, W. H. Allen & Co., 13, Waterloo Place.

IN a former work, *The Russian Army ; and its Campaigns*, a work which has been characterised as "the most important

contribution to military history, which has appeared for many years," Lieutenant Greene,—who was present at the most important operations of the Russo-Turkish war—Plevna, Shipka, and the passage of the Balkans with Gourka's column—set forth in detail, and with an unrivalled technical skill, the operations incident on these engagements and movements. In the present work he gives, in what he calls a series of sketches, his idea—an idea based on intimate acquaintance with the whole facts "of the soul which animates the Russian Military Machine; and tells what manner of man the Russian soldier is, and how he lives and moves, and has his being." There is no soldier in the army either of India or England, who may not gather from Lieutenant Greene's "*Sketches of Army Life in Russia*," something that he may "read, mark, learn and inwardly digest;" and we venture to think that to the bulk of the reading public this, his latest book, will come with as much interest as the latest three volume novel. The mistake that England, as a rule, makes, in entering on a war, is to underestimate the stamina and resources of her antagonist. So far as Russia is concerned, the sooner these are appraised at their true value, the better will it be for England and the world. It is scarcely fair to dismiss Lieutenant Greene with such a short "notice," but this is not a *Review* it is, as it professes to be, a notice. All who wish to know what the Russian soldier is, should read these sketches of *Army Life in Russia*.

Central Asian Portraits ; the Celebrities of the Khanates and the neighbouring States. By Demetrius Charles Boulger, Member of the Royal Asiatic Society, Author of "England and Russia in Central Asia," "Yakoob Beg of Kashgar," &c. London, W. H. Allen & Co., 13, Waterloo Place, Publishers to the India Office.

DEMETRIUS Charles Boulger has earned for himself a position, among those who deserve to rank as authorities on questions of Asiatic importance. The number of living writers, whose wide and intimate acquaintance with Asia, from sea to sea, is necessarily a very limited one; and still fewer of these, we venture to think, have studied more earnestly the relations of Russia and England in Asia, than Demetrius Charles Boulger. This, his latest work, is a series of biographical sketches of the chief characters in Central Asian affairs, in all seventeen; including such names as Dost Mahomed, Shere Ali, General Kaufmann, Mahomed Khan (Khiva), Izzet Kutebar, Mozaffur Eddin, General Kalpakoffsky, General Tcherniaieff, Noor Verdi Khan, Yakoob Khan and others, whose very names are quite

unknown to the bulk of English readers. Mr. Boulger states in his preface, that these sketches are based upon such information as can be gleaned from all authentic books of travels, histories, official documents, &c., &c.

The Irrigation works of India, and their financial Results.

Being a brief history and description of the Irrigation works of India, and of the profits and losses which they have caused to the State. By Robert B. Buckley, Associate Member of the Institute of Civil Engineers, Member of the Institute of Mechanical Engineers, Executive Engineer of the Public Works Department of India. London: W. H. Allen & Co., 13, Waterloo Place, Publishers to the India Office.

THIS is probably the only book in existence which deals in a comprehensive manner with the Irrigation works of India. The difficulty of obtaining accurate statistics and information regarding Irrigation, and, when obtained, these frequently, though probably, quite unconsciously have been compiled to fit in with a foregone conclusion, is known best to those who have given attention to the subject. Mr. Buckley writes with a practical knowledge of his subject, equalled by few in India; and he has ransacked every available source of information. The book is the latest and weightiest authority on the subject of Irrigation; and is highly creditable to author and publisher alike. The map accompanying the volume is one of the clearest and most complete, considering its size, we have ever seen. The works issued from the Press of W. H. Allen & Co., we think, scarcely receive that notice from the Press of India which their merits deserve; and this amongst others is not the least valuable addition to the literature of Indian subjects issued from their press.

Gulshan-i-Raz: The Mystic Rose Garden of Sâd-ud-Din Mahmud Shabîstan. The Persian text with an English translation and notes, chiefly from the Commentary of Muhammad Bin Yahyâ Lahijî. By E. H. Whinfield, M. A., Barrister-at-Law, Late of H. M.'s Bengal Civil Service. London: Trübner & Co.

THERE are, we hope, a large circle of readers to whom Mr. E. H. Whinfield's ably and scholarly translation of *Gulshan-i-Raz: The Mystic Rose Garden*, will be a pleasure of no ordinary kind. Physical science, it is true, has now-a-days so many votaries; and has made such vast strides within the present century, that those deeper questions, which have occupied the profoundest thinkers of the world in all ages and countries, have

scarcely held that position, either in the literature and the thought of England, at least, which their importance would seem to claim. It is chiefly amongst those who have acquired for themselves more or less the power of concentrated thinking, and who enjoy an amount of leisure for speculations of this kind, denied to the bulk of men, that this great production of Sâd-ud-din Mahmud Shabistan, not the least of mystics, will be hailed with the greatest delight. There is another class, smaller probably, than that interested in Philosophy, and its development in the east, to whom this translation, and the Persian text will be a source of enjoyment. We mean the small band of Orientalists yearly increasing, we hope. Mr. E. H. Whinfield has done his work with the loving care and skill of a true scholar; every notable passage carefully elucidated by copious notes. Regarding the general "get up" of the volume, it is enough to say that the Publishers are Trübner and Co., of London.

Little is known of the author of the work under notice beyond the facts, that he was born at village near Tabriz, about 1250 A. D. At Tabriz he spend the greater portion of his life, and he died there. He was born about the time of the conquest of Persia, Syria, and Mesopotamia, by the heathen Meghûis under Hulaku Khan; and during his residence at Tabriz, the capital of the new dynasty, he was a witness of the long struggle between the Christian and Muhammadan missionaries and Mullahs, to convert the Mughal Sultans; the result of which was, that the Emperor Ghazan Khan, with a hundred thousand of his followers, embraced Muhammadanism. During this interval, missionaries, sent out by Pope Nicolas IV. and Boniface VIII., were working actively at Tabriz, and the distinguished traveller Marco Polo passed through that city. The date of the composition of the *Gulshan-i-Raz* is given as 1317. It is in reality an answer to fifteen questions on the doctrines of the Sufis, or Muhammadan Mystics, propounded by Amir Syad Hosaini, a celebrated Sufi doctor of Herat, and the great interest which the work has to European thinkers is the wonderful similarity of Eastern Mysticism, as exemplified by Sufi doctrines, to those of the Neoplatonists and the Mystics of the West.

Report of the Director of Public Instruction in the Bombay Presidency for the year 1879-80. Printed at the Government Central Press, Bombay.

THIS is a bulky volume of about 150 pages, with appendices from A to W. The tables required by the Government of India occupying 27 pages of closely printed figures, showing the re-

turns from every educational agency in the Presidency. The compilation of such an elaborate report must have been a severe tax on the time of the Director of Public Instruction ; and, unless the bulk of the work has been relegated to subordinates, we should imagine that the personal influence of the Director, in inspection and visitation, could scarcely be brought to bear on educational institutions and officers within the Presidency, in the manner that might be most desirable. Reports and statistics are no doubt highly valuable and necessary ; but there is a tendency in India, to have those long drawn out beyond the point where it is just possible neither mortal patience nor the small leisure of the bulk of men can be expected to follow. As a book of reference, the Report is no doubt highly valuable, but we cannot congratulate the compilers on the table of contents. Where so much has been brought together a good index to the whole, and not a bald table of contents seems desirable.

The income of the Department during the year consisted of—

Provincial Allotment	...	Rs. 11,75,528
Local Funds	...	„ 14,06,471

A saving on both these items has been effected ; and an increase on both, over the figures at which they stood last year, appears on the present report. This is due mainly to the slow recovery from famine and agricultural distress which for three years lingered in the Presidency. The increase in the number of schools is most apparent in the Primacy ; but there has also been an increase of 38 middle class schools with 5,375 pupils.

In the Government High Schools, the number of pupils, who passed the Matriculation examination of the University was 253,—a higher number than any previous year. The percentage of successful to unsuccessful candidates being 57·89, the highest percentage yet attained. The percentage of pupils from private institutions was 41·90. The number presented being 315, of these 132 passed.

We are glad to see that the Government of Bombay have adopted the suggestion, that candidates who pass the examinations of the University are eligible over others, with certain exceptions for admission to the Public service. The First Arts candidates have a preference claim for situations of Rs. 30 a month. Graduates of distinction have reserved for them at least one half the vacancies in departments, except the Revenue Department of the value of Rs. 50 a month. In Bengal the value of a Calcutta University degree is considerably less ; and so far as we are aware, carries no preference claim for employment in Government service. This is a point worth considering, whether it might not be judiciously extended.

In our estimation, one of the most important educational undertakings of the Bombay Government is the scheme for giving instruction in Agricultural Science by special classes in eight selected High Schools, as well as in the Deccan College of Science. The effects of this instructions can become apparent only in the course of a few years. These classes are supported by grants from Municipalities and Agricultural Societies, as well as from Government, and the Bengal Government might wisely, in our estimation get some competent person to report on the feasibility of a scheme of the same sort for Bengal.

Report on the Administration of the Baroda State for 1878-79.
Published by authority, Calcutta. Printed at the Foreign Department Press.

THIS volume, like the preceding, is one of those bulky detailed statements, with a defective table of contents, and long closely printed columns of figures, and appendices from A to Z, and then beginning again at A. It is very doubtful if any mortal, either in this generation, or any succeeding one, will ever get through it.

We quote the conclusion of Raja Sir T. Madava Row's report, page 150. In submitting the foregoing results of the administration "of the Baroda estate for the year 1878-79, we will not effect any "undue diffidence. These results, added to those realized during "the three previous years, denote a beneficial and temperate transformation, as thorough and comprehensive as "any native State has undergone in a similar period. No change "has been introduced merely in the spirit of innovation, and "merely for the sake of change. Every reform has been equally "prompted and justified by clear necessity. Again, every reform "has been the result of thorough investigation, anxious consideration and careful adaptation of scientific principles to local "conditions and circumstances. It has not been our unqualified "object to conform to a foreign ideal, or to win external approval. "Our primary aim has been to secure the contentment and gratitude of the great body of our own subjects, such as they are, "and such as they are likely to be for a long time to come. The "consequence is, that though our successors, though they might "comment upon some of our continu will scarcely, I may "venture to say, have to set aside, or even materially modify our "positive actions. Nor have we introduced any such excessive "niceties or complexities of improvement as might prove unworkable after the accession of the Maharaja to power. His Highness will indeed have always to secure the best available poli

"tical intelligence and probity in the selection of his native agency for the Government of his Raj, for the rough and rude modes of the times of former Gaekwars are totally unsuited to the requirements of modern times ; and to the requirements of surrounding circumstances. But His Highness will find, it is hoped, that it is by no means difficult for any fairly constituted administration to follow the broad hints we have established, and thereby to secure the freedom and progressive prosperity of his subjects, and the honour and fame of His Highness, as the occupant of the musnud of one of the most important Mahratta Native States of India."

and its dependences. NEW SERIES, NO. XVI, *Note on the Revenue and Resources of the Punjab* ; and No. XVII, *Note on the systems of fluctuating assessments in the Punjab*, Lahore. Printed at the Punjab Government Civil Secretariat Press.

THE first of these volumes contains the *Note on the Revenue and Resources of the Punjab*, submitted by the late Henry Lawrence, then Lieutenant-Colonel Lawrence, the Resident at Lahore, in the latter half of the year 1847, and the detailed examination of that note, by H. M. Elliot. An amount of valuable information regarding the Punjab, before the period of its annexation, is here brought together and preserved, for ready reference. The second volume under notice No XVII, contains a collection of extracts from Government Records which shows the "history of the measures proposed and taken in the direction of fluctuating assessments in the Punjab. The collection begins with papers taken from the discussion on the assessment of canal-irrigated lands with water-advantage rates. This question had at the time reference to the Bari Doab Canal only ; but the results arrived at, led in a large degree to the passing of Act VIII, 1873, and the imposition of the charge known as owner's rate. There is a natural transition from this subject to the kindred question of fluctuating assessments on the lands irrigated by the Sutlej Inundation Canals, in the Pakpattan and Dipalpur tahsils, which was the next that occupied the attention of the Punjab Government. The system sanctioned here is known as the Montgomery method, and under this name has gained some notoriety. The treatment of the revenue of the lands affected by the river floods in the same district follows ; and the varied treatment of the subject is traced through the districts of the Multan and Derajat divisions, . . . Finally, certain proposals which were made for the assessment of tracts where the rain-fall is scanty or notoriously uncertain are referred to."

Précis of Official Papers, being abstracts of all Parliamentary Returns directed to be printed by both Houses of Parliament. SESSION, 1880.

W. H. Allen & Co., 13, Waterloo Place, London, Publishers to the India Office.

MESSRS. W. H. Allen & Co. have earned the thanks of all whose business, interest or tastes lead them to consult or study the Official Papers directed to be printed by both Houses of Parliament. We have before us Nos 1 & 2 of the *Précis of Official Papers* which Messrs. W. H. Allen & Co. proposed to issue monthly, at an annual cost to subscribers of 32s. a year, post free. The numbers are got up in a workman-like fashion, highly creditable to the firm; and the literary skill of the *précis* must commend itself to all readers.

VERNACULAR LITERATURE.

Bamabodha.—By Nanda Krishna Basu, M.A.

THIS is a collection of essays on a variety of subjects. The subjects treated of are chiefly of a social and scientific nature, such as man and woman, marriage among savage races, caste in Bengal, the butterfly, worms and insects, chalk, coal, the leaves of trees, &c. On all these subjects the author gives much useful information and wholesome advice for the guidance of Bengali women in social and domestic life. We do not approve of all that the author says regarding woman's function in the social system. But we are glad to admit that, even where we differ from him, we find nothing to condemn as extravagant or utopian. Indeed, his manner of stating his views always commands our respect and attention. On the subjects of scientific interest, treated of by him, he writes like one who possesses accurate knowledge, and in a manner which may be fairly expected to be both intelligible and entertaining to Bengali girls in a somewhat advanced state of culture. Altogether, we feel no hesitation in recommending the book to the promoters and conductors of female education in Bengal as one which will materially help the good cause in which they are engaged. The book is certainly one of the very best of its kind that we have seen for several years; and it forcibly suggests the reflection, that Bengali graduates will command the respect of all right-thinking men, and cease to be condemned and ridiculed, as they are now, if they make such use of their education as Babu Nanda Krishna Basu and some others are doing. They should not think, as we are afraid many of them do, that the preparation of schoolbooks is a low craft, unworthy of men who have

received University degrees. It is a craft, we say, in which only the really able and well-educated can engage. It is a craft at once useful, honourable, and patriotic. Indian graduates should remember that the composition of original works, though a legitimate object of ambition, does not fall within the province of all who desire it. A really good original work is a thing that may not be seen more than twice or thrice in a century; and whole centuries have passed away in Europe, Asia, and America without giving birth to one original work worthy of the name. We say, therefore, that our graduates should not always think of writing original works. They are not yet fit for work of that kind; nor can they be blamed or ridiculed, because they cannot do what all the world fails to do in a century. Let them therefore do what can be well done by them, and others like them, all the world over; and they may then rest assured, that all the world will respect them as good men and true, as real benefactors of humanity.

Yādava-Nandini Kāvya. Printed by Iswar Chandra Basu & Co., and Published by Chāru Chandra Mukhopādhyāya.

THE printer has done his work well, but not the author. The subject of the poem, which is complete in seven books and written in the sort of blank verse so successfully used by the late Michael Madhusudana Datta, the greatest Bengali poet of the age, is the marriage of Subhadra, the sister of Krishna, with Arjuna one of the five Pāndava brothers. It is a good subject for a poem, but in the hands of the author, who has concealed his name, it has fared very poorly. The author, it is quite clear, has no capacity for writing a long poem. A short analysis of the character of Arjuna, the hero of the poem, will explain what we mean. The author highly extols Arjuna's self-sacrifice in subjecting himself to voluntary exile on account of his violation of a bed-chamber rule under the pressure of dire necessity. He says :—

গেলা বনবাসে চলি বার বর্ষতবে,
রক্ষিতে শাক্তনা যবে বিধোঃ গোধনে,
লজ্জিলা নান্দ-বানী, পশি জ্ঞাতসারে
অস্ত্রালয়ে ; না শুনিয়া বীর-কুলোত্তম
ধর্মরাজ-মিনতিরে গেলা চলি বনে ।
স্থাপিলা এ আর্ঘ্যাবর্তে অতুল আদর্শে ;
ভারকা-সম্মান যাব নির্মল কিরণ ।

And the hero's conduct was really praiseworthy, though somewhat quixotic. But the man who rejects all entreaties to keep

him at home and goes on wandering from place to place like a penniless mendicant is found, after all, to be ill at ease in exile and impatient to enjoy the comforts of home and the pleasures of the bed-chamber. Finding no rest one night at Dwáraká, the great hero gives vent to his agony in the following strain :—

আমার মতন কিরে সেই বিরহিনী
 বঞ্চিত রয়েছে এবে পুরে নিজ-ধনে ?
 মনোব্যথা কহিছে কি যামিনীর কানে,
 ঘন শ্বাসি? কিষা ভুলি অভাগারে ধনী,
 হৃদে হৃদে নিকেতনে? না, না, কভুনয় !
 উচিত কি কভু ঘোর করিতে সংশয়
 চিরপ্রমে পাঞ্চালীর? ক্ষুদ্র জলাশয়
 ঘোর নিদাঘের তাপে যায় শুকাইয়া ;
 গভীর সাগর কিন্তু সদাই গভীর—
 শীতে, গ্রীষ্মে, বরিষায়, শরতে, হেমন্তে ।
 কি হস্তর হৃথের বাসর! কি ভীষণ !
 নাই কিন্তু বহুদিন আর এ হৃথের ।

In other words, the hero is in agonising doubts concerning the fidelity of Draupadi, who has five husbands including himself, and is feeling perfectly miserable on account of the pains and discomforts of exile. But if he is so miserable and impatient in exile, and so eager to enjoy again the pleasures of home, why call the exile an act of ideal self-sacrifice? The author, we are sure, could not have produced a character so ridiculously inconsistent with itself, if he had not aspired to be regarded as the author of a long epic poem. But the hero is not yet fully analysed. We do not yet know his strongest point. The author would fain make of him an ideal of moral purity; and this is how he endeavours to make that out. Krishna's sister has conceived a passion for Arjuna and is going into fits according to immemorial custom. Krishna's wife Satyabhámá takes up the cause of the 'striken' girl, and with her husband's permission takes her to Arjuna at dead of night. Arjuna is then engaged in cursing his exile in the manner described above. So he does not hear the first tap at his door. But the second tap is more successful, and Arjuna moves towards the door to open it. Just then Satyabhámá says :—

ঐশ্বর্য কথ তব মনে অছে, ধনঞ্জয়'

Arjuna at once turns away thinking that Satyabhámá wants to spoil him, and distinctly gives her to understand that he cannot

open the door before he hears what she has got to say. Satyabhámá, who is as honourable as Arjuna, answers :—

‘আগে না শুনিলে
খুলিবেনা দ্বার, রথি? শুন তবে তুমি’ ।

And she enters into a long conversation with Arjuna on a very delicate subject, the door remaining closed all the while. We do not remember having seen anywhere else, not even in Bengali literature, such bright pictures of chastity and self-respect. All this is simply execrable. We hope the author will not court the muses again, for they have only coquetted with him, and we sincerely trust that this advice, which is given in a perfectly friendly spirit, will be understood as given, not only to him but also to that ‘innumerable’ multitude of poetasters who think that they are enriching Bengali literature.

Melá,—Written and published by Kálimaya Ghataka, Printed by Gopál Chandra Dó, at the new Sanskrit Press, 14, Duff Street, Calcutta.

BABU Kálimaya Ghataka is favourably known to the public as the author of some good schoolbooks. But the work under notice will, we are afraid, injure the reputation he has acquired as a Bengali writer. An agricultural exhibition is not, we think, a fit subject for a poem. At least, we do not know of any other country where the Nine Sisters have condescended to invest hoes, ploughs and spades, bullocks, buffaloes and pack-horses with poetic charms. But Bengali poets form a genus by themselves; and there is nothing on earth, from the muddiest drain to the noblest mountain-stream, which is incapable of firing their imagination. In compliance with this law, Babu Kálimaya Ghataka has written this poem on the late agricultural exhibition at Ránághat in the district of Nadiyá. But how to poetise a theme which poets have in all ages refused to recognise as their own? Well, this is how Babu Kálimaya effects the difficult manœuvre. He calls all the gods of the Hindu pantheon to a grand meeting in heaven for the purpose of learning the history of the agricultural exhibition at Ránághát and he represents Narada, the Hermes of Hindu mythology, as satisfying the eager curiosity of the gods with a description the tone and temper of which may be ascertained from the short extract presented in this place :—

রাজহুয়, অশ্বমেধ, বাজপেয় আর
কত শত মহাযজ্ঞ সংখ্যা নাই তার
দেখেছি ত্রিযুগে আমি রহি বর্তমান,—

আজি বাহা ধরাভলে
দেখিলাম কতুহলে
কতু না দেখেছি, দেব, হেন অমুঠান !

Which means that Nārada, who is one of the Immortals, and who has seen all the great imperial sacrifices performed on earth since its creation, has seen nothing which could at all compare with this cattle-show at Rāuāghāt in the year of grace 1879! And this is the spirit in which nearly all Bengali poetasters write. They think that hyperbole is the soul of poetry, and they are accordingly filling Bengali literature with a species of poetry which ought to find a place in the 'Moustrosity' section of all the great museums in the world.

Lilābati; Purbardhu Translated by Gobinda Mohana Rāya Bidyābinod. Printed at the Stanhope Press, 249, Bowbazar Street, Calcutta, and published by the author at Kākiniā.

BABU Gobinda Mohana is known to our readers as the translator of some Hindu astronomical and other treatises. A good Sanskrit scholar, Babu Gobinda Mohana, has made it the principal business of his life to interpret ancient Indian science to modern India. It is a noble occupation, and one which makes the name of Babu Gobinda Mohana honorable among the well-wishers of humanity. The present work is a Bengali translation of the first half of Bhashkaracharjya's celebrated treatise on arithmetic entitled *Lilābati*. India is the home and birth-place of the science of numbers and that being the case, a Bengali version of a work by one of the greatest Indian masters of that science ought to be hailed with grateful feelings by all lovers of learning.

Sumbha-Sanhara (A drama). By Pramathanath Mitra. Printed and published by Mukherji and Co., at the Calcutta Press, 84, Radha Bazar, Calcutta.

OUR remarks on Babu Kālimaya Ghataka's poetry are not altogether inapplicable to that of Babu Pramathanath Mitra. Verbiage is the soul of the poetry of both these gentlemen. But we have one advice to give to Babu Pramathanath. He has written several poems, but he shows no signs of improvement. Is it not, therefore, time for him to bid a polite good-bye to the Muses?

Basanta-Utsaba (An opera). By the authoress of *Dipnir-vân*. Printed and published by Kâli Kinkara Chakravarti at the Valmiki Press, Calcutta.

THE writer of this small opera is a Bengali lady who is very favourably known to our readers as the authoress of *Dipnir-vân*, a novel which has been noticed at considerable length in a previous number of this *Review*. The present work fully sustains the reputation of its writer. The subject of the opera is a well-conceived story of two male and two female lovers. The story is told in an exquisite style. The authoress displays high poetical powers, and many of her descriptions are charming webs of fancy woven by a fine and subtle instinct of poesy. We give a specimen or two :—

কবির অধরে আছিষু ঘুমায়ে
 প্রেমের স্বপনে ভোর,
 সহসা পরাণে কি যেন বাজিল,
 ভাঙ্গিল ঘুমের ঘোর।

অমনি একটি চাঁদের কিরণে
 চড়িয়া এসেছি হেথা,
 মন্ত্র পুতমালা দিখু পরশিয়ে,
 যুচুক প্রাণের বাধা।

And again :—

এই যে অঞ্জলি শতদল দলে
 দেখিছ, ললনে, জল জল জলে—
 তোমারি নয়নে মাথাব, বালা।

ইহাই পরিয়ে নলিনী-নয়নে
 পশিয়ে তবান। ভবের সদনে,
 অর্ধ অঙ্গ তাঁর করি অধিকার,
 ভুলিল কঠোর ব্রতের জ্বালা।

প্রথম মিলনে যে আঁখি-লহরী—
 কপোল বাহির। বহে ধীরে ধীরে,
 প্রথম চুম্বনে যে তরল শ্বাস
 স্বরগীয় ভাবে পুরে হৃদাকাশ—
 সেই স্বাসে তাপি প্রেম-অঙ্গ-ধার
 হরৈছে সজ্জিত এ অঞ্জন সার।

This is indeed the best Bengali opera we have yet seen. Its writer is an honour to her sex and to her country.

Gocháraner Mátha. By Akshaya Chandra Sarkár. Printed and published by Nandalala Basu at the Sadharani Press, Chinsura, 1287, B.S.

BABU Akshaya Chandra Sarkár is a Bengali writer of established reputation. The little poem under notice is fully worthy of him. It contains a description of one day of shepherd-life. We must say that this description is a master-piece in its way. The occupations of peasant girls, the sports and pastimes of shepherd boys, and all that appertains to the shepherd's daily routine, are sketched with an accuracy, a minuteness, a life-like vividness, which really delight the heart, and challenge our admiration. Babu Akshaya Chandra is evidently a friend of those whose lot is cast in the humbler ranks of life. He has a heart which beats for the shepherd and the husbandman. He has an eye like the poet's, an eye which feels as it sees, and sees because it feels. And it is the poet's eye which is the real author of *Gocháraner Mátha*. It is a poem which would be regarded as a thing of beauty and a thing of value, a thing to be cherished and caressed, a thing to be proud of in any literature. And this beautiful poem, consisting of 24 octavo pages, is written without the help of one compound letter. It is a poem which should be read by all, and realised by schoolboys in Bengal.

Adhyátmiká, By Pyári Chánd Mitra. Printed and published by Iswar Chandra Basu and Co., at the Stanhope Press, 249, Bowbazar Street, Calcutta, 1880.

IN the preface to this work, containing a brief account of the author's literary career, we find the following summary of its contents :—

“ I beg now to present another work intended specially for the Hindu fair sex, entitled ‘*Adhyátmiká*,’ in the form of a novel, the contents of which are as follow : (1) The excellence of female education, consisting in the development of the soul ; (2) Directions for the development of the soul, by pure meditation and Yoga culture ; (3) Life of purity and communion with God can only be the result of the soul-state ; (4) Powers of the soul, internal lucidity, clairvoyance and magnetism as being curative of diseases ; (5) Conversation of females on female education, social and spiritual ; (6) Study of astronomy, calculated to elevate the mind (7) Directions for the Yoga culture ; (8) Humanity to the brute creation ; (9) The death of the heroine’s

mother, her father's adverse circumstances, his death, and what she did in poverty, her uncommon self-abnegation, serenity and death ; (10) On educated natives, Hindu Music, Pancháyat, and other mundane subjects ; (11) The conversation and manners of different classes of people in different circumstances, which have been portrayed in different styles, and which may perhaps be useful to foreigners, wishing to acquire a colloquial knowledge of the Bengali language."

It is clear that the author has proposed to himself too many objects for accomplishment within the brief compass of 100 duodecimo pages ; and the consequence is, that he has entirely failed to present to the reader a story possessing anything like artistic unity or æsthetic symmetry. We have accordingly several scenes, which bear no connection with each other, or with the story of the heroine. And the author's desire to render his work a book of reference for foreigners, wishing to acquire a colloquial knowledge of the Bengali language, has led him in several places to offend against the canons of taste and the rules of literary composition, by mixing up good words with bad, and polite speech with vulgar.

The author intends his work to be taken in the light of a spiritual novel. Adhyátmiká, his heroine, is a spiritual girl. She knows various branches of learning ; she loves not the riches of the earth ; she has full control over her feelings ; she loves others more than she loves herself ; she is mild, gentle, submissive, obedient, and respectful ; she possesses clairvoyant powers by means of *Yoga* ; she can throw herself into the soul-state, and enjoy such delight, as ordinary mortals cannot feel, and afford to remain unaffected by the vicissitudes of earthly life. This is a sufficiently full representation of Babu Pyári Chánd Mitra's heroine. But omitting one or two of these items (which will be presently mentioned), it is, we think, perfectly possible for a human being to be all this without receiving what may be called *technical, spiritual education*. That is to say, one may be as learned, as indifferent to the things of this world, as capable of self-command, as much a lover of others, as mild, gentle, submissive, obedient, and respectful, as far above worldly influences as Adhyátmiká without receiving that *technical, spiritual education* which Adhyátmiká has received. Adhyátmiká does indeed possess clairvoyant powers, and can throw herself into ecstasies ; but these are powers which do not form the motive power of the story ; and nothing happens to her or to anybody else which could not have happened if the author had denied her the possession of these powers. We therefore say, that as a *spiritual* novel (taking the word *spiritual* in its technical sense), Adhyátmiká is a failure. It may be also observed that

not only is spiritualism not illustrated in the story, but many things are styled *spiritual* which they are not in the technical sense, such as a wife's devotion to her husband, and which, judged by the definition of spiritualism given in many places, are the very opposite of spiritual. Indeed, the impression left on our minds by the perusal of this book is, that it is only one or two states of mind which can be called *spiritual*, and yet there is hardly a state of mind which is not *spiritual*.

But though we are unable to pronounce *Adhyátmiká* a successful *spiritual* novel, we are glad to be able to say, that the story is really a good one, and ought to be read by boys and girls. It impresses upon us in a very effective manner, the duty of being virtuous and benevolent, and it contrasts ; in an earnest and winning style the higher part of human nature with the lower. The child-like simplicity with which all this is done is characteristic of the author of *Aláker Gharer Dulál*, and is really very catching. But if *Adhyátmiká* is to be made a schoolbook for the benefit of *society*, the personal sketch of the heroine should be recast in such a way, as to show that the highest form of life does not exclude the idea of marriage. If Babu Pyári Chánd is really anxious to promote the cause of spiritualism by this work, we are afraid he will achieve scant success. For, if celibacy be, as his heroine seems intended to illustrate, a necessary condition for acquiring the truly spiritualistic frame of mind, few, we are afraid, will be inclined to regard that frame of mind as good or desirable.

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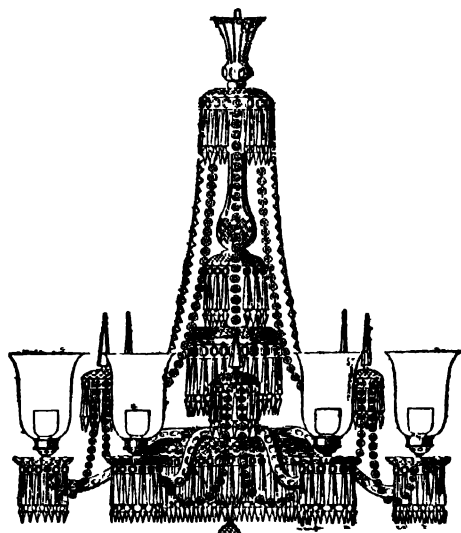


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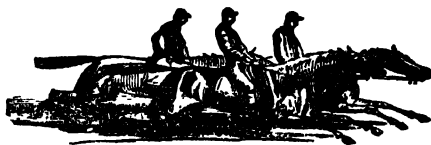
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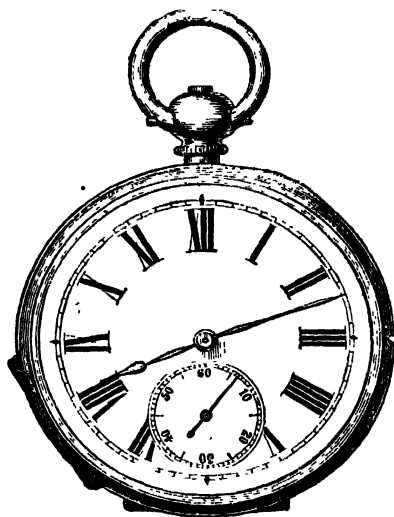
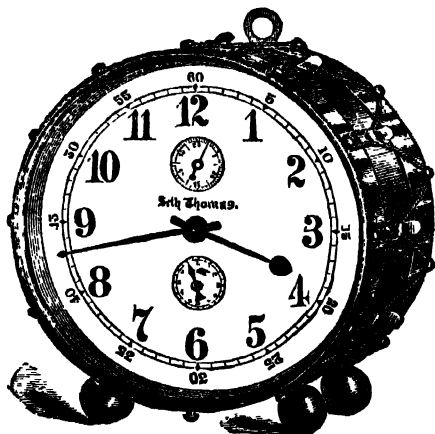
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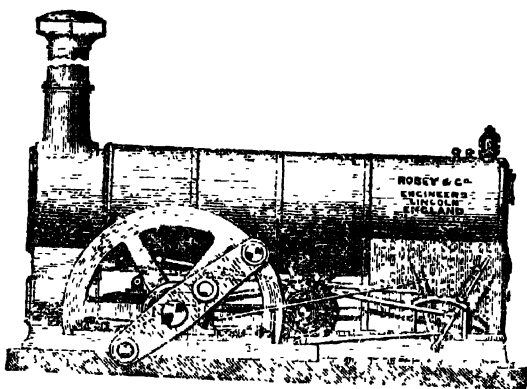
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